

A N
E S S A Y

CONCERNING

Humane Understanding.

In Four BOOKS.

Quam bellum est velle confiteri potius nescire quod nescias, quam ista effutientem nauseare, atque ipsum sibi displicere ! Cic. de Natur. Deor. l. 1.

By John Locke.



L O N D O N :

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ESTABLISHED

THE NEW YORK

OF THE NEW YORK

THE NEW YORK

TO THE
RIGHT HONOURABLE
THOMAS
EARL OF

Pembroke and Montgomery,

Baron Herbert of Cardiff, &c.

*Lord-Lieutenant of the County of Wilts, and One of
Their Majesties most Honourable Privy Council.*

My LORD,

THis Treatise, which is grown up under your Lordship's Eye, and has ventured into the World by your Order, does now, by a natural kind of Right, come to your Lordship for that Protection, which you several years since promised it. 'Tis not that I think any Name, how great soever, set at the beginning of a Book, will be able to cover the Faults are to be found it. Things in print must stand and fall by their own Worth, or the Reader's Fancy. But there being nothing more to be desired for Truth, than a fair unprejudiced Hearing, no body is more likely to procure me that, than your Lordship, who are allowed to have got so intimate an Acquaintance with her, in her more retired recesses. Your Lordship is known to have so far advanced your Speculations in the most abstract and general Knowledge of Things, beyond the ordinary reach or com-

The Epistle Dedicatory.

mon Methods , that your Allowance and Approbation of the Design of this Treatise, will at least preserve it from being condemned without reading ; and will prevail to have those Parts a little weighed, which might otherwise, perhaps, be thought to deserve no Consideration, for being somewhat out of the common road. The Imputation of Novelty, is a terrible charge amongst those who judge of Men's Heads, as they do of their Perukes, by the Fashion ; and can allow none to be right, but the received Doctrines. Truth scarce ever yet carried it by Vote any where , at its first appearance : New Opinions are always suspected, and usually opposed, without any other Reason, but because they are not already common. But Truth, like Gold, is not the less so, for being newly brought out of the Mine. 'Tis Trial and Examination must give it price, and not any antick Fashion : And though it be not yet current by the publick stamp ; yet it may, for all that, be as old as Nature, and is certainly not the less genuine. Your Lordship can give great and convincing Instances of this, whenever you please to oblige the Publick with some of those large and comprehensive Discoveries, you have made , of Truths hitherto unknown, unless to some few, to whom your Lordship has been pleased not wholly to conceal them. This alone were a sufficient Reason, were there no other, why I should Dedicate this piece to your Lordship ; and its having some little Correspondence with some parts of that nobler and vast System of the Sciences, your Lordship has made so new, exact, and

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and instructive a Draught of, I think it Glory enough, if your Lordship permit me to boast, that here and there I have fallen into some Thoughts not wholly different from yours, If your Lordship think fit, that by your encouragement this should appear in the World, I hope it may be a Reason, some time or other, to lead your Lordship farther; and you will allow me to say, That you here give the World an earnest of something, that, if they can bear with this, will be truly worth their expectation. This, my Lord, shews what a Present I here make to your Lordship; just such as the poor Man does to his rich and great Neighbour, by whom the Basket of Flowers, or Fruit, is not ill taken, though he has more plenty of his own growth, and in much greater perfection. Worthless Things receive a Value, when they are made the Offerings of Respect, Esteem, and Gratitude: These you have given me so mighty and peculiar Reasons to have in the highest degree for your Lordship, that if they can add a price to what they go along with, proportionable to their own Greatness, I can with Confidence brag, I here make your Lordship the richest Present you ever received. This I am sure, I am under the greatest Obligation to seek all occasions to acknowledge a long Train of Favours I have received from your Lordship; Favours, though great and important in themselves, yet made much more so by the Forwardness, Concern, and Kindness, and other obliging Circumstances, that never failed to accompany them. To all this you are pleased to add that which gives
yet

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yet more weight and relish to all the rest: You vouchsafe to continue me in some degrees of your Esteem, and allow me a place in your good Thoughts, I had almost said Friendship. This, my Lord, your Words and Actions so constantly shew on all occasions, even to others when I am absent, that it is not Vanity in me to mention, what every body knows: But it would be want of Manners not to acknowledge what so many are Witnesses of, and every day tell me, I am indebted to your Lordship for. I wish they could as easily assist my Gratitude, as they convince me of the great and growing Engagements it has to your Lordship. This I am sure, I should write of the *Understanding* without having any, if I were not certainly sensible of them, and did not lay hold on this Opportunity to testify to the World, how much I am obliged to be, and how much I am,

My Lord,

Your Lordships

Most Humble, and

Most Obedient Servant,

JOHN LOCKE.

THE

THE
EPISTLE
TO THE
READER.

Reader,

I Here put into thy Hands, what has been the diversion of some of my idle and heavy Hours: If it has the good luck to prove so of any of thine, and thou hast but half so much Pleasure in reading, as I had in writing it, thou wilt as little think thy Money, as I do my Pains ill bestowed. Mistake not this, for a Commendation of my Work; nor conclude, because I was pleased with the doing of it, that therefore I am fondly taken with it now it is done. He that hawks at Larks and Sparrows, has no less Sport, though a much less considerable Quarry, than he that flies at nobler Game: And he is little acquainted with the Subject of this Treatise, the UNDERSTANDING, who does not know, that as it is the most elevated Faculty of the Soul; so it is employed with a greater, and more constant Delight than any of the other. Its searches after Truth, are a sort of Hawking and Hunting, wherein the very pursuit makes a great part of the Pleasure. Every step the Mind takes in its Progress towards Knowledge, makes Discovery, which is not only new, but the best too, for the time at least. For the Understanding, like the Eye, judging of Objects, only by its own Sight, cannot but be pleased with what it discovers, having less regret for what has scaped it, because it is unknown. Thus he who has raised himself above the Alms-Basket, and not content to live lazily on scraps of begg'd Opinions, sets his own Thoughts on work, to find and follow Truth, will (whatever he lights on) not miss the Hunter's Satisfaction; every moment of his Pursuit, will reward his Pains with some Delight; and he will have Reason to think his time not ill spent, even when he cannot much boast of any great Acquisition.

This, Reader, is the Entertainment of those, who let loose their own Thoughts, and follow them in writing; which thou oughtest
not

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not to envy them, since they afford thee an Opportunity of the like Diversion, if thou wilt make use of thy own Thoughts in reading. 'Tis to them, if they are thy own, that I refer my self: But if they are taken upon Trust from others, 'tis no great Matter what they are, they not following Truth, but some meaner Consideration: and 'tis not worth while to be concerned, what he says or thinks, who says or thinks only as he is directed by another. If thou judgest for thy self, I know thou wilt judge candidly; and then I shall not be harmed or offended, whatever be thy Censure. For though it be certain, that there is nothing in this Treatise of whose Truth I am not persuaded; yet I consider my self as liable to Mistakes, as I can think thee; and know that this Book must stand or fall with thee, not by any Opinion I have of it, but thy own. If thou findest little in it new or instructive to thee, thou art not to blame me for it. It was not meant for those that had already mastered this Subject, and made a thorough Acquaintance with their own Understandings; but for my own Information, and the Satisfaction of a few Friends, who acknowledged themselves not to have sufficiently considered it. Were it fit to trouble thee with the History of this Essay, I should tell thee that five or six Friends meeting at my Chamber, and discoursing on a Subject very remote from this, found themselves quickly at a stand, by the Difficulties that rose on every side. After we had a while puzzled our selves, without coming any nearer a Resolution of those Doubts which perplexed us, it came into my Thoughts, that we took a wrong course; and that before we set our selves upon Enquiries of that Nature, it was necessary to examine our own Abilities, and see what Objects our Understandings were, or were not fitted to deal with. This I proposed to the Company, who all readily assented; and thereupon it was agreed, that this should be our first Enquiry, Some hasty and undigested Thoughts, on a Subject I had never before considered, which I set down against our next Meeting, gave the first entrance into this Discourse, which having been thus begun by Chance, was continued by Intreaty; written by incoherent parcels; and, after long intervals of neglect, resum'd again, as my Humour or Occasions permitted; and at last, in a retirement, where an Attendance on my Health gave me leisure, it was brought into that order thou now seest it.

This discontinued way of writing may have occasioned, besides others, two contrary Faults, viz. that too little, and too much may be said in it. If thou findest any thing wanting, I shall be glad, that what I have writ, gives thee any Desire that I should have gone farther: If it seems too much to thee, thou must blame the Subject; for when I first put Pen to Paper, I thought all I should have to say on this Matter, would have been contained in one sheet of Paper; but the farther

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farther I went, the larger Prospect I had : New Discoveries led me still on, and so it grew insensibly to the bulk it now appears in. I will not deny, but possibly it might be reduced to a narrower compass than it is ; and that some Parts of it might be contracted ; the way it has been writ in, by catches, and many long intervals of Interruption, being apt to cause some Repetitions. But to confess the Truth, I am now too lazie, or too busie to make it shorter.

I am not ignorant how little I herein consult my own Reputation, when I knowingly let it go with a Fault, so apt to disgust the most judicious, who are always the nicest Readers. But they who know Sloth is apt to content it self with any Excuse, will pardon me, if mine has prevailed on me, where, I think, I have a very good one. I will not therefore alledge in my Defence, that the same Notion, having different Respects, may be convenient or necessary, to prove or illustrate several Parts of the same Discourse ; and that so it has happened in many Parts of this : But waving that, I shall frankly avow, that I have sometimes dwelt long upon the same Argument, and expressed it different ways, with a quite different Design. I pretend not to publish this Essay for the Information of Men of large Thoughts and quick Apprehensions ; to such Masters of Knowledge I profess my self a Scholar, and therefore warn them before-hand not to expect any thing here, but what being spun out of my own course Thoughts, is fitted to Men of my own size, to whom, perhaps, it will not be unacceptable, that I have taken some Pains to make plain and familiar to their Thoughts some Truths, which established Prejudice, or the Abstraetness of the Ideas themselves, might render difficult. Some Objects had need be turned on every side ; and when the Notion is new, as I confess some of these are to me ; or out of the ordinary Road, as I suspect they will appear to others, 'tis not one simple view of it, that will gain it admittance into every Understanding, or fix it there with a clear and lasting Impression. There are few, I believe, who have not observed in themselves or others, That what in one way of proposing was very obscure, another way of expressing it, has made very clear and intelligible : Though afterward the Mind found little difference in the Phrases, and wondered why one failed to be understood more than the other. But every thing does not hit alike upon every Man's Imagination. We have our Understandings no less different than our Palats ; and he that thinks the same Truth shall be equally relished by every one in the same dress, may as well hope to feast every one with the same sort of Cookery : The Meat may be the same, and the Nourishment good, yet every one not be able to receive it with that Seasoning ; and it must be dressed another way, if you will have it go down with some, even of strong Constitutions. The Truth is, those who advised me to publish it, advised me, for this Reason, to publish it as it is : and since I have been brought to let it go abroad, I desire it should be understood by whoever gives himself

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the Pains to read it. I have so little Affectation to be in Print, that if I were not flattered, this Essay might be of some use to others, as I think, it has been to me, I should have confined it to the view of some Friends, who gave the first Occasion to it. My appearing therefore in Print, being on purpose to be as useful as I may, I think it necessary to make what I have to say as easie and intelligible to all sorts of Readers as I can. And I had much rather the speculative and quick-sighted should complain of my being in some parts tedious, than that any one, not accustomed to abstract Speculations, or prepossessed with different Notions, should mistake, or not comprehend my meaning.

It will possibly be censured as a great piece of Vanity, or Insolence in me, to pretend to instruct this our knowing Age, it amounting to little less, when I own that I publish it with hopes it may be useful to others. But if it may be permitted to speak freely of those, who with a feigned Modesty condemn as useless what they themselves write, methinks it savours much more of Vanity or Insolence, to publish a Book for any other end; and he fails very much of that Respect he owes the Publick, who prints, and consequently expects Men should read that, wherein he intends not they should meet with any thing of Use to themselves or others: and should nothing else be found allowable in this Treatise, yet my Design will not cease to be so; and the Goodness of my intention ought to be some Excuse for the Worthlessness of my Present. 'Tis that chiefly which secures me from the Fear of Censure, which I expect not to escape more than better Writers. Men's Principles, Notions, and Relishes are so different, that it is hard to find a Book which pleases or displeases all Men. I acknowledge the Age we live in, is not the least knowing, and therefore not the most easie to be satisfied; which if I have not the good luck to doe, no Body yet ought to be offended with me, I plainly tell all my Readers, except half a dozen, this Treatise was not at first intended for them; and therefore they need not be at the Trouble to be of that number. But yet if any one thinks fit to be angry, and rail at it, he may do it securely: For I shall find some better way of spending my time, than in such kind of Conversation. I shall always have the satisfaction to have aimed sincerely at Truth and Usefulness, though in one of the meanest ways. The Commonwealth of Learning, is not at this time without Master-Builders, whose mighty Designs in advancing the Sciences, will leave lasting Monuments to the Admiration of Posterity; But every one must not hope to be a Boyle, or a Sydenham; and in an Age that produces such Masters, as the Great — Huygenius, and the incomparable Mr. Newton, with some other of that Strain; 'tis Ambition enough to be employed as an Under-Labourer in clearing the Ground a little, and removing some of the Rubbish, that lies in the way to Knowledge; which certainly had been very much more advanced in the World,
if

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if the Endeavours of ingenious and industrious Men had not been much cumbered with the learned but frivolous use of uncouth, affected, or unintelligible Terms, introduced into the Sciences, and there made an Art of to that Degree, that Philosophy, which is nothing but the true Knowledge of Things, was thought unfit or incapable to be brought into well-bred Company, and polite Conversation. Vague and insignificant Forms of Speech, and Abuse of Language, have so long passed for Mysteries of Science: And hard or misapply'd Words, with little or no meaning, have, by Prescription, such a Right to be mistaken for deep Learning and height of Speculation, that it will not be easie to persuade either those who speak, or those who hear them, that they are but the Covers of Ignorance, and hindrance of true Knowledge. To break in upon this Sanctuary of Vanity and Ignorance, will be, I suppose, some Service to humane Understanding: Though so few are apt to think, they deceive, or are deceived in the Use of Words; or that the Language of the Sect they are of, has any Faults in it, which ought to be examined or corrected, that I hope I shall be pardon'd, if I have in the Third Book dwelt long on this Subject; and endeavour'd to make it so plain, that neither the inveterateness of the Mischief, nor the prevalency of the Fashion, shall be any Excuse for those, who will not take Care about the meaning of their own Words, and will not suffer the Significancy of their Expressions to be enquired into.

I have been told that a short Epitome of this Treatise, which was printed about two Years since, was by some condemned without reading, because innate Ideas were denied in it; they too hastily concluding, that if innate Ideas were not supposed, there would be little left, either of the Notion or Proof of Spirits. If any one take the like Offence at the Entrance of this Treatise, I shall desire him to read it through: and then I hope he will be convinc'd, that the taking away false Foundations is not to the prejudice, but advantage of Truth; which is never injur'd or endanger'd so much, as when mixed with, or built on Falshood.

One thing more I must advertise my Reader of, and that is, That the Summary of each Section is printed in *Italick Characters*, whereby the Reader may find the Contents almost as well as if it had been printed in the Margin by the side, if a little allowance be made for the Grammatical Construction, which in the Text it self could not always be so ordered, as to make perfect Propositions, which yet by the Words printed in *Italick*, may be easily guessed at.

ERRATA.

In the Dedication, pag. 1. l. 18. read found in it.

Pag. Line.	Read.	Pag. Line.	Read.	Pag. Line.	Read.
2 15	to what things	122 50	power to	241 46	of the World
4 7	and Mens words	129 27	occasion, to	242 35	subtlety
5 3	Whatsoever is,	131 41	Idea, Experi-	243 30	subtlety
	is;		ence	248 5	use them in
16 28	springs	135 14	it, in	271 3	Diversity, in
23 31	lins	— 15	willing; in	— 20	this way of
31 52	were excluded	136 30	That it is	—	not?
32 ult	were Chara-	140 50	avoid, at	—	know, what
	cters	141 31	Perception	—	other
34 22	distinguished	145 14	thinking	272 7	Qualities
	from them	— 44	Evidence	— 30	so few
— 44	Notions.	— 45	equally	275 3	cation always,
38 22	External	146 37	power of Acti-		and in thin-
39 5	less		on		king often,
40 53	nor is concer-	150 17	Idea		does not
	ned	— 32	thing: In both		steadily
51 15	as any of those		cases my	277 8	Or confines
54 27	Extension a-	154 34	Beings at least	278 3	Minds?
	lone		are	— 18	Triangle: And
56 53	more impos-	160 ult	rightly	— 23	more, did
	sible	162 9	particular Spe-	— 26	wheels. The
65 18	understanding,		cies	279 18	Ideas we by re-
	which	170 38	Ideas so, which		flexion
— 39	and vanish	171 26	Qualities in	— 46	smell which we
67 36	tune plaid	174 41	not, their	287 20	Spirit, upon
72 23	seem	178 44	use, stand	298 5	which is, in
— 34	fight	179 12	Names		truth
73 21	For those	— 15	Names	— 7	which I think
76 10	discernable	187 32	Conceptions	300 19	more to these
77 25	Chels-man	188 47	them, did	301 21	and fully con-
79 50	sense Body	204 21	other Murther		vined
84 11	understand it	209 16	burg, from	308 16	signification?
— 14	abstruse	— 42	no more	— 47	one, more, or
— 24	with the Idea	— 44	the name	320 42	waking Man
91 44	apply it in	212 53	ings		should an-
92 31	60; and	213 3	selves, to them		swer him
— 33	infinitum, and		in	321 38	for man
93 14	abstruse	— 7	which we	324 32	and proved in
95 3	confusion	— ult	no distinct	327 10	adapted
99 48	the second fix	221 17	Numbers	328 10	at that end
	Figures	224 46	others to their	330 28	three, four, and
100 9	them discourse		received	331 5	place us in
104 16	enlarging, it	227 45	them: But men	— 11	were revelation
	can	230 5	Idea to be		silent
— 37	Extension are	— 38	of mistaken	334 2	else; and that
	apt		Pretenders	344 42	obscurity
108 47	clear an Idea	232 27	communicati-	352 44	no room
109 41	Instances e-		on, it is	362 11	makes
	nough of	233 2	them. What		
110 36	all our simple	234 19	of those		
111 30	accompanies	237 49	observe several		
119 37	Motion belong		Properties		
	not	240 8	in this way		

O F Humane Understanding.

BOOK I. CHAP. I.

Introduction.

§. 1. **S**ince it is the *Understanding* that sets Man above the rest of sensible Beings, and gives him all the Advantage and Dominion, which he has over them; it is certainly a Subject, even for its Nobleness, worth our Labour to enquire into. The Understanding, like the Eye, whilst it makes us see, and perceive all other Things, takes no notice of it self: And it requires Art and Pains to set it at a distance, and make it its own Object: But whatever be the Difficulties, that lie in the way of this Enquiry; whatever it be, that keeps us so much in the Dark to our selves; sure I am, that all the Light we can let in upon our own Minds; all the Acquaintance we can make with our own Understandings, will not only be very pleasant; but bring us great Advantage, in directing our Thoughts in the search of other Things.

§. 2. This, therefore, being my *Purpose* to enquire into the Original, Certainty, and Extent of humane Knowledge; together, with the Grounds and Degrees of Belief, Opinion, and Assent; I shall not at present meddle with the Physical Consideration of the Mind; or trouble my self to examine, wherein its Essence consists, or by what Motions of our Spirits, or Alterations of our Bodies, we come to have any Sensation by our Organs, or any *Idea's* in our Understandings; and whether those *Idea's* do in their Formation, any, or all of them, depend on Matter, or no. These are Speculations, which, however curious and entertaining, I shall decline, as lying out of my Way, in the Design I am now upon. It shall suffice to my present Purpose, to consider the discerning Faculties of a Man, as they are employ'd about the Objects, which they have to do with: and I shall imagine I have not wholly misemploy'd my self in the Thoughts I shall have on this Occasion, if, in this Historical plain Method, I can give any Account of the Ways, whereby our Understandings come to attain those Notions of Things we have, and can set down any Measures of the Certainty of our Knowledge, or the Grounds of those Perswasions, which are to be found amongst Men, so various, different, and wholly contradictory; and yet asserted some where or other with such Assurance, and Confidence, that he that shall take a view of the Opinions of Mankind, observe their Opposition, and at the same time, consider the Fondness, and Devotion wherewith they are embrac'd; the Resolution, and Eagerness, wherewith they are maintain'd, may perhaps have Reason to suspect, That either there is no such thing as Truth at all; or that Mankind hath no sufficient Means to attain a certain Knowledge of it.

§. 3. It is therefore worth while, to search out the *Bounds* between Opinion and Knowledge; and examine by what Measures, in things whereof we have no certain Knowledge, we ought to regulate our Assent, and

moderate our Perswasions. In Order whereunto, I shall pursue this following Method.

First, I shall enquire into the *Original* of those *Idea's*, Notions, or whatever else you please to call them, which a Man observes, and is conscious to himself he has in his Mind; and the ways whereby the Understanding comes to be furnished with them.

Secondly, I shall endeavour to shew, what *Knowledge* the Understanding hath by those *Idea's*; and the Certainty, Evidence, and Extent of it.

Thirdly, I shall make some Enquiry into the Nature and Grounds of *Faith*, or *Opinion*: whereby I mean that Assent, which we give to any Proposition as true, of whose Truth yet we have no certain Knowledge: And here we shall have Occasion to examine the Reasons and Degrees of Assent.

§. 4. If by this Enquiry into the Nature of the Understanding, I can discover the Powers thereof; at *how far* they reach; to which things they are in any Degree proportionate; and where they fail us, I suppose it may be of use, to prevail with the busie Mind of Man, to be more cautious in meddling with things exceeding its Comprehension; to stop, when it is at the utmost Extent of its Tether; and to sit down in a quiet Ignorance of those Things, which, upon Examination, are found to be beyond the reach of our Capacities. We should not then perhaps be so forward, out of an Affectation of an universal Knowledge, to raise Questions, and perplex our selves and others with Disputes about Things, to which our Understandings are not suited; and of which we cannot frame in our Minds any clear or distinct Perceptions, or whereof (as it has perhaps too often happen'd) we have not any Notions at all. If we can find out, how far the Understanding can extend its view; how far it has Faculties to attain Certainty; and in what Cases it can only judge and guess, we may learn to content our selves with what is attainable by us in this State.

§. 5. For though the *Comprehension* of our Understandings, comes exceeding short of the vast Extent of Things; yet, we shall have Cause enough to magnifie the bountiful Author of our Being, for that Portion, and Degree of Knowledge, he has bestowed on us, so far above all the rest of the Inhabitants of this our Mansion. Men have Reason to be well satisfied with what God hath thought fit for them, since he has given them (as St. Peter says, *πᾶσι πρὸς ζωὴν καὶ σωτηρίαν*, Whatsoever is necessary for the Conveniences of Life, and Information of Virtue; and has put within the reach of their Discovery the Provisions, that may support, or sweeten this Life, and the Way that leads to a better. How short soever their Knowledge may come of an universal, or perfect Comprehension of whatsoever is, it yet secures their great Concernments, that they have Light enough to lead them to the Knowledge of their Maker, and the Discovery of their own Duties. Men may find Matter sufficient to busie their Heads, and employ their Hands with Variety, Delight, and Satisfaction; if they will not boldly quarrel with their own Constitution, and throw away the Blessings their Hands are fill'd with, because they are not big enough to grasp every thing. We shall not have much Reason to complain of the narrowness of our Minds, if we will but employ them about what may be of use to us; for of that they are very capable: And it will be an unpardonable, as well as Childish Peevishness, if we undervalue the Advantages of our Knowledge, and neglect to improve it to the ends for which it was given us, because there are some Things that are set out of the reach of it. It will be no Excuse to an idle and untoward Servant, who would
not

not attend his Business by Candle-light, to plead that he had not broad Sun-shine. The Candle, that is set up in us, shines bright enough for all our Purposes. The Discoveries we can make with this, ought to satisfy us: And we shall then use our Understandings right, when we entertain all Objects in that Way and Proportion, that they are suited to our Faculties; and upon those Grounds, they are capable of being propos'd to us; and not peremptorily, or intemperately require Demonstration, and demand Certainty, where Probability only is to be had, and which is sufficient to govern all our Concernments. If we will disbelieve every thing, because we cannot certainly know all things; we shall do much-wisely as wisely as he, who would not use his Legs, but sit still and perish, because he had no Wings to fly.

§. 6. When we know our own *Strength*, we shall the better know what to undertake with hopes of Success: And when we have well survey'd the *Powers* of our own Minds, and made some Estimate what we may expect from them, we shall not be inclined either to sit still, and not set our Thoughts on work at all in Despair of knowing any thing; nor on the other side question every thing, and disclaim all Knowledge, because some Things are not to be understood. 'Tis of great use to the Sailor to know the length of his Line, though he cannot with it fathom all the depths of the Ocean. 'Tis well he knows, that it is long enough to reach the bottom at such Places, as are necessary to direct his Voyage, and caution him against running upon Shoals, that may ruine him. Our Business here is not to know all things, but those which concern our Conduct. If we can find out those Measures, whereby a rational Creature put in that State, which Man is in, in this World, may, and ought to govern his Opinions and Actions depending thereon, we need not be troubled, that some other things scape our Knowledge.

§. 7. This was that which gave the first *Rise* to this Essay concerning the Understanding. For I thought that the first Step towards satisfying several Enquiries, the Mind of Man was very apt to run into, was, To take a Survey of our own Understandings, examine our own Powers, and see to what things they were adapted. Till that was done, I suspected we began at the wrong end, and in vain sought for Satisfaction in a quiet and secure Possession of Truths, that most concern'd us, whilst we let loose our Thoughts into the vast Ocean of *Being*, as if all that boundless Extent, were the natural, and undoubted Possession of our Understandings, wherein there was nothing exempt from its Decisions, or that escap'd its Comprehension. Thus Men, extending their Enquiries beyond their Capacities, and letting their Thoughts wander into those depths, where they can find no sure Footing; 'tis no Wonder, that they raise Questions, and multiply Disputes, which never coming to any clear Resolution, are proper only to continue and increase their Doubts, and to confirm them at last in perfect Scepticism. Whereas were the Capacities of our Understandings well considered, the Extent of our Knowledge once discovered, and the Horizon found, which sets the Bounds between the enlightned and dark Parts of Things; between what is, and what is not comprehensible by us, Men would perhaps with less scruple acquiesce in the avow'd Ignorance of the one, and employ their Thoughts and Discourse, with more Advantage and Satisfaction in the other.

§. 8. Thus much I thought necessary to say concerning the Occasion of this Enquiry into humane Understanding. But, before I proceed on to what I have thought on this Subject, I must here in the Entrance beg Pardon of my Reader, for the frequent use of the Word *Idea*, which

he will find in the following Treatise. It being that Term, which, I think, serves best to stand for whatsoever is the Object of the Understanding when a Man thinks, I have used it to express whatever is meant by *Phantasm*, *Notion*, *Species*, or whatever it is, which the Mind can be employ'd about in thinking; and I could not avoid frequently using it.

I presume it will be easily granted me, that there are such *Idea's* in Men's Minds; every one is conscious of them in himself, and a Man's Words and Actions will satisfy him, that they are in others.

Our first Enquiry then shall be how they come into the Mind.

CH A P. II.

No innate Principles in the Mind.

§. 1. **I**T is an established Opinion amongst some Men, That there are in the Understanding certain *innate Principles*; some primary Notions, *κοινὰ εἰσβολαί*, Characters, as it were stamped upon the Mind of Man, which the Soul receives in its very first Being; and brings into the World with it. It would be sufficient to convince unprejudiced Readers of the falseness of this Supposition, if I should only shew (as I hope I shall in the following Parts of this Discourse) how Men, barely by the Use of their natural Faculties, may attain to all the Knowledge they have, without the help of any innate Impressions; and may arrive at Certainty, without any such Original Notions or Principles. For I imagine any one will easily grant, That it would be impertinent to suppose the *Idea's* of Colours innate in a Creature, to whom God hath given Sight, and a Power to receive them by the Eyes from external Objects: and no less unreasonable would it be to attribute several Truths to the Impressions of Nature and innate Characters, when we may observe in our selves Faculties, fit to attain as easie and certain Knowledge of them, as if they were Originally imprinted on the Mind.

But because a Man is not permitted without Censure to follow his own Thoughts in the search of Truth, when they lead him ever so little out of the common Road: I shall set down the Reasons, that made me doubt of the Truth of that Opinion, as an Excuse for my Mistake, if I be in one, which I leave to be consider'd by those, who with me dispose themselves to embrace Truth, where-ever they find it.

§. 2. There is nothing more commonly taken for granted, than that there are certain Principles both *Speculative* and *Practical* (for they speak of both) universally agreed upon by all Mankind: which therefore they argue, must needs be the constant Impressions, which the Souls of Men receive in their first Beings, and which they bring into the World with them, as necessarily and really as they do any of their inherent Faculties.

§. 3. This Argument, drawn from *Universal Consent*, has this Misfortune in it, That if it were true in matter of Fact, that there were certain Truths, wherein all Mankind agreed, it would not prove them innate, if there can be any other way shewn how Men may come to that Universal Agreement in the things they do consent in; which I presume may be done.

§. 4. But, which is worse, this Argument of universal Consent, which is made use of to prove innate Principles, seems to me a Demonstration that

that there are none such : because there are none to which all Mankind give an universal Assent. I shall begin with the Speculative, and instance in those magnified Principles of Demonstration *Whatsoever it is ; and 'Tis impossible for the same thing to be, and not to be,* which of all others I think have the most allow'd Title to innate. These have so settled a Reputation of Maxims universally received, that 'twill, no doubt, be thought strange if any one should seem to question it. But yet I take liberty to say, That these Propositions are so far from having an universal Assent, that there are a great Part of Mankind, to whom they are not so much as known.

§. 5. For, first 'tis evident that all *Children* and *Ideots* have not the least Apprehension or Thought of them : and the want of that is enough to destroy that universal Assent, which must needs be the necessary concomitant of all innate Truths : it seeming to me near a Contradiction, to say, that there are Truths imprinted on the Soul, which it perceives or understands not ; imprinting, if it signifie any thing, being nothing else but the making certain Truths to be perceived. For to imprint any thing on the Mind without the Mind's perceiving it, seems to me hardly intelligible. If therefore *Children* and *Ideots* have Souls, have Minds, with those Impressions upon them, they must unavoidably perceive them, and necessarily know and assent to these Truths : which since they do not, it is evident that there are no such Impressions. For if they are not Notions naturally imprinted, How can they be innate ? And if they are Notions imprinted, How can they be unknown ? To say a Notion is imprinted on the Mind, and yet at the same time to say that the Mind is ignorant of it, and never yet took notice of it, is to make this Impression nothing. No Proposition can be said to be in the Mind, which it never yet knew, which it was never yet conscious of. For if any one may ; then, by the same Reason, all Propositions that are true, and the Mind is capable ever of assenting to, may be said to be in the Mind, and to be imprinted : Since if any one can be said to be in the Mind, which it never yet knew, it must be only because it is capable of knowing it ; and so the Mind is of all Truths it ever shall know. Nay, thus Truths may be imprinted on the Mind, which it never did, nor ever shall know : for a man may live long, and die at last in Ignorance of many Truths, which his mind was capable of knowing, and that with Certainty. So that if the Capacity of knowing be the natural Impression contended for, all the Truths a Man ever comes to know, will, by this Account, be, every one of them, innate ; and this great Point will amount to no more, but only to a very improper way of speaking ; which whilst it pretends to assert the contrary, says nothing different from those, who deny innate Principles. For no Body, I think, ever denied that the Mind was capable of knowing several Truths. The Capacity, they say, is innate, the Knowledge acquired. But then to what end such contest for certain innate Maxims ? If Truths can be imprinted on the Understanding without being perceived, I can see no difference there can be, between any Truths the Mind is capable of knowing in respect of their Original : They must all be innate, or all adventitious : In vain shall a Man go about to distinguish them. He therefore that talks of innate Notions in the Understanding, cannot (if he intend thereby any distinct sort of Truths) mean such Truths to be in the Understanding, as it never perceived, and is yet fully ignorant of. For if these Words (*to be in the Understanding*) have any Propriety, they signifie to be understood. So that, to be in the Understanding, and, not to be understood ; to be in the Mind, and, never to be perceived, is all one as to say, any thing is, and is not, in the Mind or Understanding.

If therefore these two Propositions, *Whatsoever is, is*, and, *It is impossible for the same thing to be, and not to be*, are by Nature imprinted, Children cannot be ignorant of them: Infants, and all that have Souls must necessarily have them in their Understandings, know the Truth of them, and assent to it.

§. 6. To avoid this, 'tis usually answer'd, that all Men know and assent to them, *when they come to the use of Reason*, and this is enough to prove them innate. I answer,

§. 7. Doubtful Expressions, that have scarce any signification, go for clear Reasons to those, who being prepossessed, take not the pains to examine even what they themselves say. For to apply this Answer with any tolerable Sense to our present Purpose, it must signify one of these two things; either, That as soon as Men come to the use of Reason, these supposed native Inscriptions come to be known, and observed by them: Or else, that the Use and Exercise of Men's Reasons assist them in the Discovery of these Principles, and certainly make them known to them.

§. 8. If they mean that by the *Use of Reason* Men may discover these Principles, and that this is sufficient to prove them innate; their way of arguing will stand thus, (*viz.*) That whatever Truths Reason can certainly discover to us, and make us firmly assent to, those are all naturally imprinted on the Mind; since that universal Assent, which is made the Mark of them, amounts to no more but this; That by the use of Reason, we are capable to come to a certain Knowledge of, and assent to them; and by this Means there will be no difference between the Maxims of the Mathematicians, and Theorems they deduce from them: All must be equally allow'd innate, they being all Discoveries made by the use of Reason, and Truths that a rational Creature may certainly come to know, if he apply his Thoughts rightly that Way.

§. 9. But how can those Men think the *use of Reason* necessary to discover Principles that are supposed innate, when Reason (if we may believe them) is nothing else, but the Faculty of deducing unknown Truths from Principles or Propositions, that are already known? That certainly can never be thought innate, which we have need of Reason to discover, unless as I have said, we will have all the certain Truths, that Reason ever teaches us, to be innate. We may as well think the use of Reason necessary to make our Eyes discover visible Objects, as that there should be need of Reason, or the Exercise thereof to make the Understanding see what is Originally engraven in it, and cannot be in the Understanding before it be perceived by it. So that to make Reason discover those Truths thus imprinted, is to say, that the use of Reason discovers to a Man, what he knew before; and if Men have these innate, imprinted Truths Originally, and before the use of Reason, and yet are always ignorant of them, till they come to the use of Reason, 'tis in effect to say, that Men know, and know them not at the same time.

§. 10. 'Twill here perhaps be said, that Mathematical Demonstrations, and other Truths, that are not innate, are not assented to as soon as propos'd, wherein they are distinguish'd from these Maxims, and other innate Truths. I shall have occasion to speak of Assent upon the first proposing, more particularly by and by: I shall here only, and that very readily, allow, That these Maxims, and Mathematical Demonstrations are in this different; That the one has need of Reason, using of Proofs, to make them out, and to gain our Assent: but the other, as soon as understood, are, without any the least reasoning, embraced and assented to. But I withal beg leave to observe, That it lays open the Weakness of this.

this Subterfuge, which requires the *Use of Reason* for the Discovery of these general Truths: Since it must be confessed, that in their Discovery, there is no Use made of reasoning at all. And I think those who give this Answer, will not be forward to affirm, that the Knowledge of this Maxim, *That it is impossible for the same thing to be, and not to be*, is a deduction of our Reason. For this would be to destroy that Bounty of Nature, they seem so fond of, whilst they make the Knowledge of those Principles to depend on the labour of our Thoughts. For all Reasoning is search, and casting about, and requires Pains and Application. And how can it with any tolerable Sence be suppos'd, that what was imprinted by Nature, as the Foundation and Guide of our Reason, should need the Use of Reason to discover it?

§. 11. Those who will take the Pains to reflect with a little attention on the Operations of the Understanding, will find that this ready Assent of the Mind to some Truths, depends not either on native Inscription, nor the *Use of Reason*; but on a Faculty of the Mind quite distinct from both of them, as we shall see hereafter. Reason therefore, having nothing to do in procuring our Assent to these Maxims, if by saying, that *Men know and assent to them, when they come to the Use of Reason*, be meant, That the use of Reason assists us in the Knowledge of these Maxims, it is utterly false; and were it true, would prove them not to be innate.

§. 12. If by knowing and assenting to them, *when we come to the use of Reason* be meant, that this is the time when they come to be taken notice of by the Mind; and that as soon as Children come to the use of Reason, they come also to know and assent to these Maxims; this also is false, and frivolous. *First*, It is false: because it is evident these Maxims are not in the Mind so early as the use of Reason; and therefore the coming to the use of Reason is falsely assigned, as the time of their Discovery. How many instances of the use of Reason may we observe in Children a long time before they have any Knowledge of this Maxim, *That it is impossible for the same Thing to be, and not to be*? and a great part of illiterate People, and Savages, pass many Years, even of their rational Ages, without ever thinking on this, and the like general Propositions. I grant Men come not to the Knowledge of these general and more abstract Truths, which are thought innate till they come to the use of Reason; and I add, nor then neither. Which is so, because till after they come to the use of Reason, those general abstract *Idea's* are not framed in the Mind, about which those general Maxims are, which are mistaken for innate Principles, but are indeed Discoveries made, and Verities introduced and brought into the Mind by the same Way, and discovered by the same Steps, as several other Propositions, which no Body was ever so extravagant as to suppose innate. This I hope to make plain in the sequel of this Discourse. I allow therefore a Necessity, that Men should come to the use of Reason, before they get the Knowledge of those general Truths: but deny, that Men's coming to the use of Reason is the time of their Discovery.

§. 13. In the mean time, it is observable, that this saying that Men know, and assent to these Maxims, *when they come to the use of Reason*, amounts in reality of Fact to no more but this, That they are never known, nor taken notice of before the use of Reason, but may possibly be assented to sometime after during a Man's Life; but when, is uncertain: And so may all other knowable Truths as well as these, which therefore have no Advantage, nor distinction from others by this Note of being known when we come to the use of Reason; nor are thereby proved to be innate, but quite the contrary.

§. 14. But *Secondly*, were it true, that the precise time of their being known, and assented to, were, when Men come to the *Use of Reason*; neither would that prove them innate. This way of arguing is as frivolous, as the Supposition of it self is false. For by what kind of Logick will it appear, that any Notion is Originally by Nature imprinted in the Mind in its first Constitution, because it comes first to be observed, and assented to, when a Faculty of the Mind, which has quite a distinct Province, begins to exert it self? And therefore, the coming to the use of Speech, if it were supposed the time, that these Maxims are first assented to (which it may be with as much Truth, as the time when Men come to the use of Reason) would be as good a Proof that they were innate, as to say they are innate because Men assent to them, when they come to the use of Reason. I agree then with these Men of innate Principles, that there is no Knowledge of these general and self-evident Maxims in the Mind, till it comes to the Exercise of Reason: but I deny that the coming to the use of Reason, is the precise time when they are first taken notice of; and that if it were, that it would prove them innate. All that can with any Truth be meant by this Proposition, That Men *assent to them when they come to the use of Reason*, is no more but this, That the making of general abstract *Idea's*, and the Understanding of general Names, being a Concomitant of the rational Faculty, and growing up with it, Children commonly get not those general *Idea's*, nor learn the Names that stand for them, till having for a good while exercised their Reason about familiar and more particular *Idea's*, they are by their ordinary Discourse and Actions with others, acknowledged to be capable of rational Conversation. If assenting to these Maxims, when Men come to the use of Reason, can be true in any other Sence, I desire it may be shewn; or at least, how in this, or any other Sence it proves them innate.

§. 15. The Senses at first let in particular *Idea's*, and furnish the yet empty Cabinet: And the Mind by degrees growing familiar with some of them, they are lodged in the Memory, and Names got to them. Afterwards the Mind proceeding farther, abstracts them, and by Degrees learns the use of general Names. By this manner the Mind comes to be furnish'd with *Idea's* and Language, the Materials about which to exercise its discursive Faculty: And the use of Reason becomes daily more visible, as these Materials, that give it Employment, increase. But though the having of general *Idea's*, and the use of general Words and Reason usually grow together; yet, I see not, how this any way proves them innate. The Knowledge of some Truths, I confess, is very early in the Mind; but in a way that shews them not to be innate. For, if we will observe, we shall find it still to be about *Idea's*, not innate, but acquired: It being about those first, which are imprinted by external Things, with which Infants have earliest to do, and which make the most frequent Impressions on their Senses. In *Idea's*, thus got, the Mind discovers, That some agree, and others differ, probably as soon as it has any use of Memory; as soon as it is able, to retain and receive distinct *Idea's*: But whether it be then, or no, this is certain, it does so, long before it has the use of Words; or comes to that, which we commonly call the *use of Reason*. For a Child knows as certainly, before it can speak, the difference between the *Idea's* of Sweet and Bitter (*i. e.* That Sweet is not Bitter) as it knows afterwards (when it comes to speak) That Worm-wood and Sugar-plumbs, are not the same thing.

§. 16. A Child knows not that Three and Four are equal to Seven, till he comes to be able to count to Seven, and has got the Name and *Idea* of Equality: and then upon the explaining those Words, he presently assents to, or rather perceives the Truth of that Proposition. But neither does he then readily assent, because it is an innate Truth, nor was his Assent wanting, till then, because he wanted the *Use of Reason*; but the Truth of it appears to him, as soon as he has settled in his Mind the clear and distinct *Idea's*, that these Names stand for: And then, he knows the Truth of that Proposition, upon the same Grounds, and by the same means that he knew before, That a Rod and Cherry are not the same thing; and upon the same Grounds also, that he may come to know afterwards, *That it is impossible for the same thing to be, and not to be*, as we shall more fully shew hereafter. So that the later it is before any one comes to have those general *Idea's*, about which those Maxims are; or to know the Signification of those general Terms that stand for them; or to put together in his Mind, the *Idea's* they stand for; the later also will it be before he comes to assent to those Maxims, whose Terms, with the *Idea's* they stand for; being no more innate than those of a Cat or a Weasel, he must stay till Time and Observation have acquainted him with them; and then he will be in a Capacity, to know the Truth of these Maxims, upon the first Occasion, that shall make him put together those *Idea's* in his Mind, and observe whether they agree or disagree, according as is expressed in those Propositions. And therefore it is, That a Man knows that Eighteen and Nineteen, are equal to Thirty Seven by the same self-Evidence, that he knows One and Two to be equal to Three: Yet, a Child knows that, not so soon as the other; not for want of the use of Reason; but because the *Idea's* the Words Eighteen, Nineteen, and Thirty seven stand for, are not so soon got, as those, which are signify'd by One, Two, and Three.

§. 17. This Evasion therefore of general Assent, when Men come to the use of Reason, failing as it does, and leaving no difference between those supposed-innate, and other Truths, that are afterwards acquired and learnt, Men have endeavoured to secure an universal Assent to those they call Maxims, by saying, they are generally assented to, as soon as proposed, and the Terms they are propos'd in, understood: Seeing all Men, even Children, as soon as they hear and understand the Terms, assent to these Propositions, they think it is sufficient to prove them innate. For since Men never fail, after they have once understood the Words, to acknowledge them for undoubted Truths, they would infer, That certainly these Propositions were first lodged in the Understanding, which, without any teaching, the Mind, at very first Proposal, immediately closes with, and assents to, and after that never doubts again.

§. 18. In Answer to this, I demand whether ready assent, given to a Proposition upon first hearing, and understanding the Terms, be a certain mark of an innate Principle? If it be not, such a general assent is in vain urged as a Proof of them: If it be said, that it is a mark of innate, they must then allow all such Propositions to be innate, which are generally assented to as soon as heard, whereby they will find themselves plentifully stored with innate Principles. For upon the same ground (*viz.*) of Assent at first hearing and understanding the Terms, That Men would have those Maxims pass for innate, they must also admit several Propositions about Numbers, to be innate, *That One and Two are equal to Three, That Two and Two are equal to Four*, and a multitude of other the like Propositions in Numbers, that every Body assents to, at first hearing, and understanding the Terms must have a place amongst these innate Axioms. Nor is this the

Prerogative of Numbers alone, and Propositions made about several of them : But even natural Philosophy, and all the other Sciences afford Propositions, which are sure to meet with Assent as soon as they are understood. *That two Bodies cannot be in the same place*, is a Truth that no Body any more sticks at, than at that Maxim, *That it is impossible for the same thing to be, and not to be ; That White is not Black, That a Square is not a Circle, That Tellowness is not Sweetness* : These, and a million of other such Propositions, as many at least, as we have distinct *Idea's*, every Man in his Wits, at first hearing, and knowing what the Names stand for, must necessarily assent to. If then these Men will be true to their own Rule, and have *Assent at first hearing and understanding the Terms*, to be a mark of innate, they must allow, not only as many innate Propositions, as Men have distinct *Idea's*; but as many as Men can make Propositions, wherein different *Idea's* are denied one of another. Since every Proposition, wherein one different *Idea* is denied of another, will as certainly find Assent at first hearing and understanding the Terms, as this general one, *It is impossible for the same to be, and not to be ;* or that which is the foundation of it, and is the easier understood of the two, *The same is not different* : By which Account, they will have Legions of innate Propositions of this one sort, without mentioning any other. But since no Proposition can be innate, unless the *Idea's* about which it is, be innate, This will be, to suppose all our *Idea's* of Colours, Sounds, Tastes, Figures, &c. innate ; than which there cannot be any thing more opposite to Reason and Experience. Universal and ready assent, upon hearing and understanding the Terms, is (I grant) a mark of self-evidence : but self-evidence, depending not on innate Impressions, but on something else (as we shall shew hereafter) belongs to several Propositions, which no Body was yet so extravagant, as to pretend to be innate.

§. 19. Nor let it be said, That those more particular self-evident Propositions, which are assented to at first hearing, as, *That One and Two are equal to Three, That Green is not Red, &c.* are received as the Consequences of those more universal Propositions, which are look'd on as innate Principles : since any one, who will but take the Pains to observe, what passes in the Understanding, will certainly find, That these, and the like less general Propositions, are certainly known and firmly assented to, by those, who are utterly ignorant of those more general Maxims ; and so, being earlier in the Mind than those (as they are called) first Principles, cannot owe to them the Assent, wherewith they are received at first hearing.

§. 20. If it be said, that these Propositions, *viz. Two and Two are equal to Four, Red is not blue, &c.* are not general Maxims, nor of any great use. I answer, That makes nothing to the Argument of universal assent, upon hearing and understanding. For if that be the certain mark of innate, whatever Proposition can be found, that receives general assent, as soon as heard and understood, that must be admitted for an innate Proposition, as well as this Maxim, *That it is impossible for the same thing to be, and not to be*, they being upon this Ground equal. And as to the difference of being more general, that makes this Maxim more remote from being innate ; those general and abstract *Idea's*, being more strangers to our first Apprehensions, than those of more particular self-evident Propositions ; and therefore, 'tis longer before they are admitted and assented to by the growing Understanding. And as to the usefulness of these magnified Maxims, that perhaps will not be found so great as is generally conceived, when it comes in its due place to be more fully considered.

§. 21. But we have not yet done with *assenting to Propositions at first hearing*
and

and understanding their Terms; 'tis fit we first take notice, That this, instead of being a mark that they are innate, is a proof of the contrary: Since it supposes, that several, who understand and know other things, are ignorant of these Principles, till they are propos'd to them; and that one may be unacquainted with these Truths, till he hears them from others. For if they were innate, What need they be propos'd, in order to gaining assent; when, by being in the Understanding, by a natural and original Impression (if there were any such) they could not but be known before? Or, doth the proposing them, print them clearer in the Mind than Nature did? If so, then the Consequence will be, That a Man knows them better, after he has been thus taught them, than he did before. Whence it will follow, That these Principles may be made more evident to us by other's teaching, than Nature has made them by Impression: which will illagree with the Opinion of innate Principles, and give but little Authority to them; but on the contrary, makes them unfit to be the foundations of all our other Knowledge, as they are pretended to be. This cannot be deny'd, that Men grow first acquainted with many of these self-evident Truths, upon their being propos'd: But it is clear, that whosoever does so, finds in himself, That he then begins to know a Proposition, which he knew not before; and which from thenceforth he never questions: not because it was innate; but, because the consideration of the Nature of the things contained in those Words, would not suffer him to think otherwise, how, or whensoever he is brought to reflect on them.

§. 22. If it be said, The Understanding hath an *implicit Knowledge* of these Principles, but not an explicit, before this first hearing, (as they must, who will say, That they are in the Understanding before they are known) it will be hard to conceive what is meant by a Principle imprinted on the understanding Implicitly; unless it be this, That the Mind is capable of understanding and assenting firmly to such Propositions. And thus all Mathematical Demonstrations, as well as first Principles, must be received as native Impressions on the Mind: which, I fear they will scarce allow them to be, who find it harder to demonstrate a Proposition, than assent to it, when demonstrated: And few Mathematicians will be forward to believe, That all the Diagrams they have drawn, were but Copies of those innate Characters, which Nature had engraven upon their Minds.

§. 23. There is I fear this farther weakness in the foregoing Argument, which would persuade us, That therefore those Maxims are to be thought innate, which Men *admit at first hearing*, because they assent to Propositions, which they are not taught, nor do receive from the force of any Argument or Demonstration, but a bare Explication or Understanding of the Terms. Under which, there seems to me to lie this fallacy; That Men are supposed not to be *taught*, nor to *learn* any thing *de novo*; when in truth, they are taught and do learn something they were ignorant of before. For first it is evident, they have learned the Terms and their Signification: neither of which was born with them. But this is not all the acquired Knowledge in the case: The *Idea's* themselves, about which the Proposition is, are not born with them, no more than their Names, but got afterwards. So, that in all Propositions that are assented to, at first hearing the Terms of the Proposition, their standing for such *Idea's*, and the *Idea's* themselves that they stand for, being neither of them innate, I would fain know what there is remaining in such Propositions that is innate. For I would gladly have any one name that Proposition, whose Terms or *Idea's* were either of them innate. We by degrees get *Idea's* and Names, and learn their appropriated connection one with another;

and then to Propositions, made in such Terms, whose signification we have learnt, and wherein the Agreement or Disagreement we can perceive in our *Idea's*, when put together, is expressed, we at first hearing assent; though to other Propositions, in themselves as certain and evident, but which are concerning *Idea's*, not so soon nor easily got, we are at the same time no way capable of assenting. For though a Child quickly assent to this Proposition, *That an Apple is not Fire*; when, by familiar Acquaintance, he has got the *Idea's* of those two different things distinctly imprinted on his Mind, and has learnt that the Names *Apple* and *Fire* stand for them: yet, it will be some years after, perhaps, before the same Child will assent to this Proposition, *That it is impossible for the same thing to be, and not to be*. Because, that though, perhaps, the Words are as easie to be learnt: yet, the signification of them, being more large, comprehensive, and abstract, than of the Names annexed to those sensible things, the Child hath to do with, it is longer before he learns their precise meaning, and it requires more time plainly to form in his Mind those general *Idea's*, they stand for. Till that be done, you will in vain endeavour to make any Child assent to a Proposition, made up of such general Terms: But as soon as ever he has got those *Idea's*, and learn'd their Names, he forwardly closes with the one, as well as the other of the forementioned Propositions; and with both for the same Reason; (*viz.*) because he finds the *Idea's* he has in his Mind, to agree or disagree, according as the Words standing for them, are affirmed, or denied one of another in the Proposition. But if Propositions be brought to him in Words, which stand for *Idea's* he has not yet in his Mind: to such Propositions, however evidently true or false in themselves, he affords neither assent nor dissent, but is ignorant. For Words, being but empty sounds, any farther than they are signs of our *Idea's*, we cannot but assent to them, as they correspond to those *Idea's* we have, but no farther than that. But the shewing by what Steps and Ways Knowledge comes into our Minds, and the grounds of several degrees of assent, being the Business of the following Discourse, it may suffice to have only touched on it here, as one Reason, that made me doubt of those innate Principles.

§. 24. To conclude this Argument of universal Consent, I agree with these Defenders of innate Principles; That if they are *innate*, they must needs have *universal assent*. For that a Truth should be innate, and yet not assented to, is to me as unintelligible, as for a Man to know a Truth, and be ignorant of it at the same time. But then, by these Men's own Confession, they cannot be innate; since they are not assented to, by those who understand not the Terms, nor by a great part of those who do understand them, but have yet never heard, nor thought of those Propositions; which I think, is at least one half of Mankind. But were the Number far less, it would be enough to destroy universal assent, and thereby shew these Propositions not to be innate, if Children alone were ignorant of them.

§. 25. But that I may not be accused, to argue from the thoughts of Infants, which are unknown to us, and to conclude, from what passes in their Understandings, before they express it; I say next, That these two general Propositions are not the Truths, that *first possess the Minds* of Children; nor are antecedent to all acquired, and adventitious Notions: which if they were innate, they must needs be. Whether we can determine it or no, it matters not, there is certainly a time, when Children begin to think, and their Words and Actions do assure us, that they do so. When therefore they are capable of Thought, of Knowledge, of As-

sent,

sent, can it rationally be supposed, they can be ignorant of those Notions that Nature has imprinted, were there any such? Can it be imagin'd, with any appearance of Reason, That they perceive the Impressions from things without; and be at the same time ignorant of those Characters, which Nature it self has taken care to stamp within? Can they receive and assent to adventitious Notions, and be ignorant of those, which are supposed woven into the very Principles of their Being, and imprinted there in indelible Characters, to be the Foundation, and Guide of all their acquired Knowledge, and future Reasonings? This would be, to make Nature take Pains to no Purpose; Or, at least, to write very ill; since its Characters could not be read by those Eyes, which saw other things very well; and those are very ill supposed the clearest parts of Truth, and the Foundations of all our Knowledge, which are not first known, and without which, the undoubted Knowledge of several other things may be had. The Child certainly knows, that the *Nurse* that feeds it, is neither the *Cat* it plays with, nor the *Blackmoor* it is afraid of; That the *Wormseed* or *Mustard* it refuses, is not the *Apple* or *Sugar* it cries for: this it is certainly and undoubtedly assured of: But will any one say, it is by Virtue of this Principle, *That it is impossible for the same thing to be, and not to be*, that it so firmly assents to these, and other parts of its Knowledge? Or that the Child has any Notion or Apprehension of that Proposition at an Age, wherein yet 'tis plain, it knows a great many other Truths? He that will say, Children join these general abstract Speculations with their sucking Bottles, and their Rattles, may, perhaps, with Justice be thought to have more Passion and Zeal for his Opinion; but less Sincerity and Truth, than one of that Age.

§. 26. Though therefore there be several general Propositions, that meet with constant and ready assent, as soon as proposed to Men grown up, who have attained the use of more general and abstract *Ideas*, and Names standing for them: yet they not being to be found in those of tender Years, who nevertheless know other things, they cannot pretend to universal assent of intelligent Persons, and so by no means can be supposed innate: It being impossible, that any Truth which is innate (if there were any such) should be unknown, at least to any one, who knows any thing else. Since, if they are innate Truths, they must be innate thoughts: there being nothing a Truth in the Mind, that it has never thought on. Whereby it is evident, if there be any *innate Truths*, they must necessarily be the first of any thought on; the first that appear there.

§. 27. That the general Maxims, we are discoursing of, are not known to Children, *Idiots*, and a great part of Mankind, we have already sufficiently proved: whereby it is evident, they have not an universal assent, nor are general Impressions. But there is this farther Argument in it against their being innate: That these Characters, if they were native and original Impressions, *should appear fairest and clearest* in those Persons, in whom yet we find no Foot-steps of them: And 'tis, in my Opinion, a strong Presumption, that they are not innate; since they are least known to those, in whom, if they were innate, they must needs exert themselves with most Force and Vigour. For *Children, Idiots, Savages*, and *illiterate* People, being of all others the least corrupted by Custom, or borrowed Opinions; Learning, and Education, having not cast their native thoughts into new Moulds; nor by super-inducing foreign and studied Doctrines, confounded those fair Characters Nature had written there; one might reasonably imagine, That in their Minds these innate Notions should lie open fairly to every ones view, as 'tis certain the thoughts of
Children

Children do. It might very well be expected, that these Principles should be perfectly known to Naturals; which being stamped immediately on the Soul (as these Men suppose) can have no dependence on the Constitutions, or Organs of the Body, the only confessed difference between them and others. One would think, according to these Men's Principles, That all the native Beams of Light (were there any such) should in those, who have no Reserves, no Arts of Concealment, shine out in their full Lustre, and leave us in no more doubt of their being there, than we are of their love of Pleasure, and abhorrence of pain. But alas, amongst Children, *Ideots*, Savages, and the grossly illiterate, what general Maxims are to be found? What universal Principles of Knowledge? Their Notions are few and narrow, borrowed only from those Objects they have had most to do with, and which have made upon their Senses the frequentest and strongest Impression. A Child knows his Nurse and his Cradle, and by degrees the Play-things of a little more advanced Age: And a young Savage has, perhaps, his Head fill'd with Love and Hunting, according to the fashion of his Tribe. But he that from a Child untaught, or a wild Inhabitant of the Woods, will expect these abstract Maxims, or the Principles of Sciences, will I fear find himself mistaken. Such kind of general Propositions, are seldom mentioned in the Huts of *Indians*: much less are they to be found in the thoughts of Children, or any Impressions of them on the Minds of Naturals. They are the Discourses of the Schools, and Academies of learned Nations, accustomed to that sort of Conversation, or Learning, where Disputes are frequent: These Maxims being suited to artificial Argumentation, and useful for Conviction; but not much conducing to the discovery of Truth, or advancement of Knowledge. But of their small use for the improvement of Knowledge, I shall have occasion to speak more at large, *l. 4. c. 7.*

§. 28. I know not how absurd this may seem to the Masters of Demonstration: And probably, it will hardly down with any Body at first Hearing. I must therefore beg you a little to lay by your prejudice, and suspend your censure, till you have heard me out in the sequel of this Discourse, being very willing to submit to better Judgments. And since I impartially search after Truth, I shall not be sorry to be convinced, that I have been too fond of my own Notions; which I confess we are all apt to be, when Application and Study have warmed our Heads with them.

Upon the whole matter, I cannot see any ground, to think these two famed speculative Maxims innate: since they are not universally assented to; Since the assent they so generally find, is no other than what several Propositions, not allowed to be innate, equally partake in with them; And since the assent is given them, is produced another way, and comes not from natural Inscription, as I doubt not but to make appear in the following Discourse. And if *these first Principles* of Knowledge and Science, are found not to be innate, no other speculative Maxims can (I suppose) with better Right pretend to be so.

C H A P. III.

No innate practical Principles.

§. 1. **I**F those speculative Maxims, whereof we discoursed in the foregoing Chapter, have not an actual universal assent from all Mankind, as we there proved, it is much more visible concerning *practical Principles*, that they *come short of an universal Reception*: and I think it will be hard to instance any one moral Rule, which can pretend to so general and ready an assent as, *What is, is*, or to be so manifest a Truth as this, *That it is impossible for the same thing to be, and not to be*. Whereby it is evident, That they are farther removed from a title to be innate; and the doubt of their being native Impressions on the Mind, is stronger against these moral Principles than the other. Not that it brings their Truth at all in question. They are equally true, though not equally evident. Those speculative Maxims carry their own Evidence with them: but moral Principles require Reasoning and Discourse, and some Exercise of the Mind, to discover the Certainty of their Truth. They lie not open as natural Characters engraven on the Mind; which if any such were, they must needs be visible by themselves, and by their own light be certain and known to every Body. But this is no Derogation to their Truth and Certainty, no more than it is to the Truth or Certainty of the Three Angles of a Triangle being equal to two right ones, because it is not so evident as *The whole is bigger than a part*; nor so apt to be assented to at first hearing. It may suffice, that these moral Rules are capable of Demonstration: and therefore it is our own faults, if we come not to a certain Knowledge of them. But the Ignorance wherein many Men are of them, and the slowness of assent wherewith others receive them, are manifest Proofs that they are not innate, and such as offer themselves to their view without searching.

§. 2. Whether there be any such moral Principles, wherein all Men do agree, I appeal to any, who have been but moderately conversant in the History of Mankind, and look'd abroad beyond the Smoak of their own Chimneys. Where is that practical Truth, that is universally received without doubt or question, as it must be if innate? *Justice*, and keeping of Contracts, is, that which *most Men seem to agree in*. This is a Principle, which is thought to extend it self to the Dens of Thieves, and the Troops of Robbers; and they who have gone farthest towards the putting off of Humanity it self, keep Faith and Rules of Justice one with another. I grant that Outlaws themselves do this one amongst another: but 'tis, without receiving these as the innate Laws of Nature. They practice them as Rules of convenience within their own Communities: But it is impossible to conceive, that he imbraces Justice as a practical Principle, who acts fairly with his Fellow-High-way-men, and at the same time plunders or kills the next honest Man he meets with. Justice and Truth are the common ties of Society; and therefore, even Outlaws and Villains, who break with all the World besides, must keep Faith and Rules of Equity amongst themselves, or else they cannot hold together. But will any one say, That those that live by Fraud and Rapine, have innate Principles of Truth and Justice, which they allow and assent to?

§. 3. Perhaps it will be urged, That the *tacit assent of their Minds agrees to what their Practice contradicts*. I answer, *First*, I have always thought

thought the Actions of Men the best Interpreters of their thoughts. But since it is certain, that most Men's Practice, and some Men's open Professions, have either questioned or denied these Principles, it is impossible to establish an universal consent (though we should look for it only amongst grown Men) without which, it is impossible to conclude them innate. Secondly, 'Tis very strange and unreasonable, to suppose innate practical Principles, that terminate only in Contemplation. Practical Principles, derived from Nature, are there for Operation, and must produce Conformity of Action, not barely speculative assent to their truth, or else they are in vain distinguish'd from speculative Maxims. Nature, I confess, has put into Man a desire of Happiness, and an aversion to Misery; These indeed are innate practical Principles, which (as practical Principles ought) do continue constantly, to operate and influence all our Actions, without ceasing: These may be observed in all Persons and all Ages, steady and universal; but these are Inclinations of the Will and Appetite, not Impressions and Characters on the Understanding. I deny not, that there are natural tendencies imprinted on the Minds of Men; and that, from the very first instances of sense and perception, there are some things that are grateful, and others unwelcome to them; some things that they incline to, and others that they fly: But this makes nothing for innate Characters on the Mind, which are to be the Principles of Knowledge, regulating our Practice. Such natural Impressions on the Understanding, are so far from being confirmed hereby, that this is an Argument against them; since if there were certain Characters, imprinted by Nature on the Understanding, as the Principles of Knowledge, we could not but perceive them constantly operate in us, and influence our Knowledge, as we do those others on the Will and Appetite; which never cease to be the constant Spring and Motives of all our Actions, to which, we perpetually feel them strongly impelling us.

§. 4. Another Reason that makes me doubt of any innate practical Principles, is, That I think, *there cannot any one moral Rule be propos'd, whereof a Man may not justly demand a Reason*: which would be perfectly ridiculous and absurd, if they were innate, or so much as self-evident; which every innate Principle must needs be, and not need any Proof to ascertain its Truth, nor want any Reason to gain it Approbation. He would be thought void of common Sense, who asked on the one side, or on the other side went about to give a Reason, *Why it is impossible for the same thing to be, and not to be*. It carries its own Light and Evidence with it, and needs no other Proof: He that understands the Terms, assents to it for its own sake, or else nothing will ever be able to prevail with him to do it. But should that most unshaken Rule of Morality, and Foundation of all social Virtue, *That one should do as he would be done unto*, be propos'd to one, who never heard it before, but yet is of capacity to understand its meaning; Might he not without any absurdity ask a Reason, why? And were not he that propos'd it, bound to make out the Truth and Reasonableness of it to him? Which plainly shews it not to be innate; for if it were, it could neither want nor receive any Proof: but must needs (at least, as soon as heard and understood) be received and assented to, as an unquestionable Truth, which a Man can by no means doubt of. So that the truth of all these moral Rules, plainly depends upon some other antecedent to them, and from which they must be deduced, which could not be, if either they were innate, or so much as self-evident.

§. 5. That

§. 5. That Men should keep their Compacts, is certainly a great and undeniable Rule in Morality: But yet, if a Christian, who has the view of Happiness and Misery in another Life, be asked why a Man must keep his Word, he will *give* this as a *Reason*: Because God, who has the Power of eternal Life and Death, requires it of us. But if an *Hobbist* be asked why; he will answer: Because the Publick requires it, and the *Leviathan* will punish you, if you do not. And if one of the old *Heathen* Philosophers had been asked, he would have answered: Because it was dishonest, below the Dignity of a Man, and opposite to Vertue, the highest Perfection of humane Nature.

§. 6. Hence naturally flows the great variety of Opinions, concerning Moral Rules, which are to be found amongst Men, according to the different sorts of Happiness, they have a Prospect of, or propose to themselves: Which could not be, if practical Principles were innate, and imprinted in our Minds immediately by the Hand of God. I grant the existence of God, is so many ways manifest, and the Obedience we owe him, so congruous to the Light of Reason, that a great part of Mankind give Testimony to the Law of Nature: But yet I think it must be allowed, That several Moral Rules, may receive, from Mankind, a very general Approbation, without either knowing, or admitting the true ground of Morality; which can only be the Law of a God, who sees Men in the dark, and has Power enough to punish the proudest Offender. For God, having, by an inseparable connection, joined *Vertue* and publick Happiness together; and made the Practice thereof, necessary to the preservation of Society, and visibly *beneficial* to all, with whom the virtuous Man has to do; it is no wonder, that every one should, not only allow, but recommend, and magnifie those Rules to others, from whose observance of them, he is sure to reap Advantage to himself. He may, out of Interest, as well as Conviction, cry up that for Sacred; which if once trampled on, and prophaned, he himself cannot be safe nor secure. This, though it takes nothing from the Moral and Eternal Obligation, which these Rules evidently have; yet it shews, that the outward acknowledgment Men pay to them in their Words, proves not that they are innate Principles: Nay, it proves not so much, as, that Men assent to them inwardly in their own Minds, as the inviolable Rules of their own Practice: Since we find that self-Interest and the Conveniences of this Life, make many Men own an outward Profession and Approbation of them, whose Actions sufficiently prove, that they very little consider the Law-giver, that prescribed these Rules; nor, the Hell he has ordain'd for the Punishment of those that transgress them.

§. 7. For, if we will not in Civility allow too much Sincerity to the Professions of most *Men*, but think their Actions to be the Interpreters of their Thoughts; we shall find, that they have *no* such internal Veneration for these Rules, nor so *full a Perswasion of their Certainty* and Obligation. The great Principle of Morality, *To do as one would be done to*, is more commended, than practised. But the Breach of this Rule cannot be a greater Vice, than to teach others, That it is no Moral Rule, nor Obligatory, would be thought Madness, and contrary to that Interest Men sacrifice to, when they break it themselves. Perhaps *Conscience* will be urged as checking us for such Breaches, and so the internal Obligation and Establishment of the Rule be preserved.

§. 8. To which, I answer, That I doubt not, but without being written on their Hearts, many Men, may, by the same way that they come to the Knowledge of other things, come to assent to several Moral Rules, and

be convinced of their Obligation. Others also may come to be of the same Mind, from their Education, Company, and Customs of their Country; which *Persuasion* however got, will serve to set Conscience on work, which is nothing else, but our own Opinion of our own Actions. And if Conscience be a Proof of innate Principles, contraries may be innate Principles: Since some Men, with the same bent of Conscience, prosecute what others avoid.

§. 9. But I cannot see how any *Men*, should ever *transgress* those *Moral Rules*, with *Confidence*, and *Serenity*, were they innate, and stamped upon their Minds. View but an Army at the sacking of a Town, and see what Observations, or Sense of Moral Principles, or what touch of Conscience, for all the Outrages they do. *Robberies*, *Murders*, *Rapes*, are the Sports of Men set at Liberty from Punishment and Censure. Have there not been whole Nations, and those of the most civilized People, amongst whom, the exposing their Children, and leaving them in the Fields, to perish by Want, or wild Beasts, has been the Practice, as little condemned or scrupled, as the begetting them? Do they not still, in some Countries, put them into the same Graves with their Mothers, if they die in Child-birth; Or dispatch them, if a pretended Astrologer declares them to have unhappy Stars? And are there not Places, where at a certain Age, they kill, or expose their Parents without any remorse at all? In a Part of *Asia*, the Sick, when their Case comes to be thought desperate, are carried out and laid on the Earth, before they are dead, and left there,

(a) Gruber *apud* Thevenot, part 4. p. 23.
(β) Lambert. *apud* Thevenot, p. 38.
(γ) Vossius *de Nili Origine* c. 18. 19.
(δ) P. Mart. Dec. 1.
(ε) *Hes des Incas*, l. 1. c. 12.
(ζ) Lery, c. 16.

exposed to Wind and Weather, to perish without Assistance or Pity. (α) It is familiar amongst the *Mengrelians*, a People professing Christianity, to bury their Children alive without scruple. (β) There are Places where they eat their own Children. (γ) The *Caribes* were wont to geld their Children, on purpose to fat and eat them. (δ) And *Garcilasso de la Vega* tells us of a People in *Peru*, which were wont to fat and eat their Children they got on their female Captives, which they kept as Concubines for that Purpose. (ε) The Virtues, whereby the *Tonoupinambas* believed they merited Paradise, were, Revenge, and eating abundance of their Enemies. (ζ) They have not so much as a Name for God, *Lery* pag. 216. No Acknowledgment of any God, no Religion, no Worship, pag. 231. The Saints, who are canoniz'd amongst the *Turks*, lead Lives, which one cannot with Modesty relate. A remarkable Passage to this Purpose, out of the Voyage of *Baumgarten*, which is a Book, not every Day to be met with, I shall set down at large, in the Language it is published in. *Ibi* (*sc. prope Belbes in Aegypto*) *vidimus sanctum unum Saracenicum inter arenarum cumulos, ita ut ex utero matris prodiit nudum sedentem. Mos est, ut didicimus Mahometistis, ut eos, qui amentes & sine ratione sunt, pro sanctis colant & venerentur. Insuper & eos qui cum diu vitam egerint inquinatissimam, voluntariam demum pœnitentiam & paupertatem, sanctitate venerandos deputant. Ejusmodi verò genus hominum libertatem quandam effrœnem habent, domos quas volunt intrandi, edendi, bibendi, & quod majus est, concumbendi; ex quo concubitu, si proles secuta fuerit, sancta similiter habetur. His ergo hominibus, dum vivunt, magnos exhibent honores; mortuis verò vel templa vel monumenta extruunt amplissima, eosque contingere ac sepelire maximæ fortunæ ducunt loco. Audivimus hæc dicta & dicenda per interpretem à Mucrolo nostro. Insuper sanctum illum, quem eo loci vidimus, publicitus apprime commendari, eum esse Hominem sanctum, divinum ac integritate præcipuum; eo quod, nec fœminarum unquam esset nec puerorum, sed tantummodo aſellarum concubitor atque mularum.* Peregr. Baumgarten, l. 2. c. 1. p. 73. Where then are those innate Principles, of Justice, Piety, Gratitude, Equity, Chastity?

Chastity? Or, where is that universal Consent, that assures us there are such inbred Rules? Murders in Duels, when Fashion has made them honourable, are committed without remorse of Conscience: Nay, in many Places, Innocence in this Case is the greatest Ignominy. And if we will look abroad, to take a view of Men, as they are, we shall find, that they have a remorse, in one Place, for doing or omitting that, which others, in another Place, think they merit by.

§. 10. He that will carefully peruse the History of Mankind, and look abroad into the several Tribes of Men, and with indifferency survey their Actions, will be able to satisfy himself, That there is scarce that Principle of Morality to be named, or *Rule of Vertue* to be thought on (those only excepted, that are absolutely necessary to hold Society together, which commonly too are neglected betwixt distinct Societies) which is not, somewhere or other, *slighted* and condemned by the general Fashion of *whole Societies* of Men, governed by practical Opinions, and Rules of living quite opposite to others.

§. 11. Here, perhaps, 'twill be objected, that it is no Argument, that the *Rule is not known, because it is broken*. I grant the Objection good, where Men, though they transgress, yet disown not the Law; where fear of Shame, Censure, or Punishment, carries the Mark of some awe it has upon them. But it is impossible to conceive, that a *whole Nation* of Men should all *publickly reject* and renounce, what every one of them, certainly and infallibly, knew to be a Law: For so they must, who have it naturally imprinted on their Minds. 'Tis possible, Men may sometimes own *Rules of Morality*, which, in their private Thoughts, they do not believe to be true, only to keep themselves in Reputation, and Esteem amongst those, who are perswaded of their Obligation. But 'tis not to be imagin'd, That a whole Society of Men, should, publickly and professedly, disown, and cast off a Rule, which they could not, in their own Minds, but be infallibly certain, was a Law; nor be ignorant, That all Men, they should have to do with, knew it to be such: And therefore must every one of them apprehend from others, all the Contempt and Abhorrence due to one, who professes himself void of Humanity; and one, who confounding the known and natural measures of Right and Wrong, cannot but be look'd on, as the professed Enemy of their Peace and Happiness. Whatever practical Principle is innate, cannot but be known to every one, to be just and good. It is therefore little less than a contradiction, to suppose, That whole Nations of Men should both in their Professions, and Practice unanimously and universally give the Lye to, what, by the most invincible Evidence, every one of them knew to be true, right, and good. This is enough to satisfy us, That no practical Rule, which is any where universally, and with publick Approbation, or Allowance, transgressed, can be supposed innate. But I have something farther to add, in Answer to this Objection.

§. 12. The breaking of a Rule, say you, is no Argument, that it is unknown. I grant it: But the *generally allowed breach of it any where*, I say, is a *Proof, that it is not innate*. For Example, Let us take any of these Rules; which being the most obvious deductions of Humane Reason, and conformable to the natural Inclination of the greatest part of Men, fewest People have had the Impudence to deny, or Inconsideration to doubt of. If any can be thought to be naturally imprinted, none, I think, can have a fairer Pretence to be innate, than this; *Parents preserve and cherish your Children*. When therefore you say, That this is an innate Rule, What do you mean? Either, that it is an innate Principle; which upon all Oc-

casions, excites and directs the Actions of all Men : Or else, that it is a Truth, which all Men have imprinted on their Minds, and which therefore they know, and assent to. But in neither of these Sences is it innate. *First*, That it is not a Principle, which influences all Men's Actions, is, what I have proved by the Examples before cited : Nor need we seek so far as *Mingrelia* or *Peru*, to find instances of such as neglect, abuse, nay and destroy their Children ; or look on it only as the more than Brutality of some savage and barbarous Nations, when we remember, that it was a familiar, and uncondemned Practice amongst the *Greeks* and *Romans*, to expose, without pity or remorse, their innocent Infants. *Secondly*, That it is an innate Truth, known to all Men, is also false. For, *Parents preserve your Children*, is so far from an innate Truth, that it is no Truth at all ; it being a Command, and not a Proposition, and so not capable of Truth or Falshood. To make it capable of being assented to as true, it must be reduced to some such Proposition as this : *It is the Duty of Parents to preserve their Children*. But what Duty is, cannot be understood without a Law ; nor a Law be known, or supposed without a Law-maker, or without Reward and Punishment : So that it is impossible, that this, or any other practical Principle should be innate ; *i. e.* be imprinted on the Mind as a Duty, without supposing the *Idea's* of God, of Law, of Obligation, of Punishment, of a Life after this, innate. For that Punishment follows not, in this Life, the breach of this Rule ; and consequently, that it has not the Force of a Law in Countries, where the generally allowed Practice runs counter to it, is in it self evident. But these *Idea's* (which must be all of them innate, if any thing as a Duty be so) are so far from being innate, that 'tis not every studious or thinking Man, much less every one that is born, in whom they are to be found clear and distinct : And that one of them, which of all others seems most likely to be innate, is not so, (I mean the *Idea* of God) I think, in the next Chapter, will appear very evident to any considering Man.

§. 13. From what has been said, I think we may safely conclude, That, *whatever practical Rule is, in any Place, generally, and with allowance, broken, cannot be supposed innate*, it being impossible, that Men should, without Shame or Fear, confidently and serenely break a Rule, which they could not but evidently know, that God had set up, and would certainly punish the breach of (which they must if it were innate) to a degree to make it a very ill Bargain to the Transgressor. Without such a Knowledge as this, a Man can never be certain, that any thing is his Duty. Ignorance or Doubt of the Law ; hopes to escape the Knowledge or Power of the Law-maker, or the like, may make Men give way to a present Appetite : But let any one see the Fault, and the Rod by it, and with the Transgression, a Fire ready to punish it ; a Pleasure tempting, and the Hand of the Almighty visibly held up, and prepared to take Vengeance (for this must be the Case, where any Duty is imprinted on the Mind) and then tell me, whether it be possible, for People, with such a Prospect, such a certain Knowledge as this, wantonly, and without scruple, to offend against a Law, which they carry about them in indelible Characters, and that stares them in the Face, whilst they are breaking it ? Whether Men, at the same time that they feel in themselves the imprinted Edicts of an Omnipotent Law-maker, can, with assurance and gait, slight and trample under Foot his most sacred Injunctions ? And lastly, Whether it be possible, that whilst a Man thus openly bids defiance to this innate Law, and supreme Law-giver, all the by-standers ; yea even the Governors and Rulers of the People, full of the same Sense, both of the Law and Law-maker,

maker, should silently connive, without testifying their dislike, or laying the least blame on it? Principles of Actions indeed there are lodged in Mens Appetites, but these are so far from being innate Moral Principles, that if they were left to their full swing, they would carry Men to the overturning of all Morality. Moral Laws are set as a curb and restraint to these exorbitant Desires, which they cannot be but by Rewards and Punishments, that will over-balance the satisfaction any one shall propose to himself in the breach of the Law. If therefore any thing be imprinted on the Mind of all Men as a Law, all Men must have a certain and unavoidable knowledge, that certain, and unavoidable punishment will attend the breach of it. For if Men can be ignorant or doubtful of what is innate, innate Principles are insisted on, and urged to no purpose; Truth and Certainty (the things pretended) are not at all secured by them: But Men are in the same uncertain, floating estate with, as without them. An evident indubitable knowledge of unavoidable punishment, great enough to make the transgression very uneligible, must accompany an innate Law: Unless with an innate Law, they can suppose an innate Gospel too. I would not be here mistaken, as if, because I deny an innate Law, I thought there were none but positive Laws. There is a great deal of difference between an innate Law, and a Law of Nature; between something imprinted on our Minds in their very original, and something that we may attain to the knowledge of, by our natural Faculties from natural Principles. And I think they equally forsake the Truth, who running into the contrary extreams, either affirm an innate Law, or deny that there is a Law, knowable by the light of Nature; *i. e.* without the help of positive Revelation.

§. 14. The difference there is amongst Men in their practical Principles, is so evident, that, I think, I need say no more to evince, that it will be impossible to find any innate Moral Rules, by this mark of general assent: And 'tis enough to make one suspect, that the supposition of such innate Principles, is but an Opinion taken up at pleasure; since those who talk so confidently of them, are so sparing to tell us, *which they are*. This might with Justice be expected from those Men, who lay stress upon this Opinion: and it gives occasion to distrust either their Knowledge or Charity, who declaring, That God has imprinted on the Minds of Men, the foundations of Knowledge, and the Rules of Living, are yet so little favourable to the Information of their Neighbours, or the Quiet of Mankind, as not to point out to them, which they are, in the variety Men are distracted with. But in truth, were there any such innate Principles, there would be no need to teach them. Did Men find such innate Propositions stamped on their Minds, they would easily be able to distinguish them from other Truths, that they afterwards learned, and deduced from them; and there would be nothing more easie, than to know what, and how many they were. There could be no more doubt about their number, than there is about the number of our Fingers; and 'tis like then, every System would be ready to give them us by tale. But since no body, that I know, has ventured yet to give a Catalogue of them, they cannot blame those who doubt of these innate Principles; since even they who require Men to believe, that there are such innate Propositions, do not tell us what they are. 'Tis easie to foresee, that if different Men of different Sects should go about to give us a List of those innate practical Principles, they would set down only such as suited their distinct Hypotheses, and were fit to support the Doctrines of their particular Schools or Churches: A plain evidence, that there are no such innate Truths. Nay, a great part of Men are

so far from finding any such innate Moral Principles in themselves, that by denying freedom to Mankind; and thereby making Men no other than bare Machins, they take away not only innate, but all Moral Rules whatsoever, and leave not a possibility to believe any such, to those who cannot conceive, how any thing can be capable of a Law, that is not a free Agent: And upon that ground, they must necessarily reject all Principles of Vertue, who cannot *put Morality and Mechanism together*; which are not very easie to be reconciled, or made consistent.

§. 15. When I had writ this, being informed, that my Lord *Herbert* had in his Books *de Veritate*, assigned these innate Principles, I presently consulted him, hoping to find, in a Man of so great Parts, something that might satisfie me in this point, and put an end to my Enquiry. In his Chapter *de Instinctu naturali*, p. 76. edit. 1656. I met with these six Marks of his *notitiæ Communes*, 1. *Prioritas*. 2. *Independentia*. 3. *Universalitas*. 4. *Certitudo*. 5. *Necessitas*, i. e. as he explains it, *faciunt ad hominis conservationem*. 6. *Modus conformationis*, i. e. *Assensus nullâ interpositâ morâ*. And at the latter end of his little Treatise, *De Religione Laici*, he say this of these innate Principles: *Adeo ut non uniuscujusvis Religionis confinio arctentur quæ ubique vigent veritates. Sunt enim in ipsâ mente cælitus descriptæ nullisque traditionibus, sive scriptis, sive non scriptis, obnoxie*, p. 3. And *veritates nostræ Catholicæ, quæ tanquam indubia Dei effata in foro interiori descripta*. Thus having given the marks of the innate Principles or common Notions, and asserted their being imprinted on the Minds of Men by the Hand of God, he proceeds at last to set them down; and they are these: 1. *Esse aliquod supremum numen*. 2. *Numen illud coli debere*. 3. *Virtutem cum pietate conjunctam optimam esse rationem cultûs divini*. 4. *Rescipiscendum esse à peccatis*. 5. *Dari præmium vel pœnam post hanc vitam transactam*. These, though I allow them to be clear Truths, and such as, if rightly explained, a rational Creature can hardly avoid giving his assent to: yet I think he is far from proving them innate Impressions in *Foro interiori descriptæ*. For I must take leave to observe,

§. 16. First, That these Five Propositions are either all, or more than all, those common Notions writ on our Minds by the finger of God, if it were reasonable to believe any at all to be so written. Since there are other Propositions, which even by his own Rules, have as just a pretence to such an Original, and may be as well admitted for innate Principles, as, at least, some of these Five he enumerates, *viz. Do as thou wouldst be done unto*: And, perhaps, some hundreds of others, when well considered.

§. 17. Secondly, That all his Marks are not to be found in each of his Five Propositions, *viz.* his First, Second, and Third Marks, agree perfectly to neither of them; and the First, Second, Third, Fourth, and Sixth Marks, agree but ill to his Third, Fourth, and Fifth Propositions. For besides that, we are assured from History, of many Men, nay, whole Nations who doubt or disbelieve some or all of them, I cannot see how the Third, *viz. That Vertue joined with Piety, is the best Worship of God*, can be an innate Principle, when the name, or sound *Vertue*, is so hard to be understood; liable to so much uncertainty in its signification; and the thing it stands for, so much contended about, and difficult to be known. And therefore this can be but a very uncertain Rule of Humane Practice, and serve but very little to the conduct of our Lives, and is therefore very unfit to be assigned as an innate practical principle.

§. 18. For let us consider this Proposition as to its meaning, (for it is the sence, and not sound, that is and must be the Principle or common Notion) *viz. Vertue is the best Worship of God*; i. e. is most acceptable to him; which, if *Vertue* be taken, as most commonly it is, for those Actions, which according to the different Opinions of several Countries, are accounted laudable, will be a Proposition so far from being certain, that it will not be true. If *Vertue* be taken for Actions conformable to God's Will, or to the Rule prescribed by God, which is the true and only measure of Vertue; then this Proposition, *That Vertue is the best Worship of God*, will be most true and certain, but of very little use in humane Life: since it will amount to no more but this, *viz. That God is pleased with the doing of what he Commands*; which a Man may certainly know to be true, without knowing what it is that God doth command; and so be as far from any Rule or Principle of his Actions, as he was before: And I think very few will take a Proposition which amounts to no more than this, *viz. That God is pleased with the doing of what he himself commands*, for an innate Moral principle writ on the Minds of all Men, (however true and certain it may be) since it teaches so little. Whosoever does so, will have reason to think hundreds of Propositions, innate Principles, since there are many who have as good a title as this to be received for such, which no body yet ever put into that rank of innate Principles.

§. 19. Nor is the Fourth Proposition (*viz.*) *Men must repent of their Sins*, much more instructive, till what those Actions are, that are meant by Sins, be set down. For the word *Peccata*, or *Sins*, being put, as it usually is, to signify in general ill Actions, that will draw on punishment upon the Doers; What great Principle of Morality can that be, to tell us we should be sorry, and cease to do that which will bring mischief upon us, without knowing what those particular Actions are, that will do so? Indeed, this is a very true Proposition, and fit to be inculcated on, and received by those, who are supposed, to have been taught, what Actions in all kinds are *sin*; but neither this, nor the former, can be imagined to be innate Principles; nor to be of any use, if they were innate, unless the particular measures and bounds of all Vertues and Vices, were engraven in Mens Minds, and were innate Principles also, which I think is very much to be doubted. And therefore, I imagine, it will scarce seem possible, that God should engrave Principles in Mens minds, in words of uncertain signification, such as are *Vertues* and *Sins*; which amongst different Men, stand for different things: Nay, it cannot be supposed to be in words at all, (which being in most of these Principles very general names) cannot be understood, but by knowing the particulars comprehended under them. And in the practical instances, the measures must be taken from the knowledge of the Actions themselves, and the Rules of them abstracted from words, and antecedent to the knowledge of Names; which Rules a Man must know, what Language soever he chance to learn, whether English or Japan, or if he should learn no Language at all, or never should understand the use of Words, as happens in the case of Dumb and Deaf Men. When it shall be made out, that Men ignorant of Words, or untaught by the Laws and Customs of their Country, that it is part of the Worship of God, Not to kill another Man; Not to know more Women than one; Not to procure Abortion; Not to expose their Children; Not to take from another what is his, though we want it our selves, but on the contrary, relieve and supply his wants: And whenever we have done the contrary, we ought to repent, be sorry, and resolve to do so no more. When, I say, all men shall be proved actually

ally to know, and allow all these and a thousand other such Rules, all which come under these two general words made use of above, *viz. Virtutes & Peccata, Vertues and Sins*, there will be more reason for admitting these, and the like, for common Notions, and practical Principles: yet after all, universal Consent (were there any in Moral Principles) to Truths, the knowledge whereof might be attained otherwise, would scarce prove them to be innate; which is all I contend for.

§. 20. Nor will it be of much moment here, to offer that very ready, but not very material Answer, (*viz.*) That the *innate Principles* of Morality, may, by *Education, and Custom*, and the general Opinion of those amongst whom we converse, be *darkened*, and at last quite worn out of the Minds of Men. Which assertion of theirs, if true, quite takes away the Argument of universal Consent, by which this Opinion of innate Principles is endeavoured to be proved: unless those men will think it reasonable, that their own private Perswasions, or that of their Party, should pass for universal Consent; a thing not unfrequently done, when men presuming themselves to be the only Masters of right Reason, cast by the Votes and Opinions of the rest of Mankind, as not worthy the reckoning. And then their Argument stands thus: The Principles which all mankind allow for true, are innate; those that men of right Reason admit, are the Principles allowed by all mankind; we and those of our mind, are men of right Reason; therefore we agreeing, our Principles are innate; which is a very pretty way of arguing, and a short cut to Infallibility. For otherwise it will be very hard to understand, how there be some Principles which all men do acknowledge, and agree in; and yet there are none of those Principles which are *not by depraved Custom and ill Education blotted out* of the minds of many men: Which is to say, That all men admit, but yet many men do deny, and dissent from them. And indeed the supposition of such first Principles, will serve us to very little purpose; and we shall be as much at a loss with, as without them, if they may by any humane Power, such as is the Will of our Teachers, or Opinions of our Companions, be altered or lost in us; and notwithstanding all this boast of first Principles, and innate Light, we shall be as much in the dark and uncertainty, as if there were no such thing at all. It being all one to have no Rule, and one that will warp any way; or amongst various and contrary Rules, not to know which is the right. But concerning innate Principles, I desire these men to say, whether they can, or cannot, by Education and Custom, be blurr'd and blotted out: If they cannot, we must find them in all Mankind alike, and they must be clear in every body: And if they may suffer variation from adventitious Notions, we must then find them clearest and most perspicuous, nearest the Fountain in Children and illiterate People, who have received least impression from foreign Opinions. Let them take which side they please, they will certainly find it inconsistent with visible matter of fact, and daily observation.

§. 21. I easily grant, that there are great numbers of *Opinions*, which, by men of different Countries, Educations, and Tempers, are received and embraced as *first and unquestionable Principles*; many whereof, both for their absurdity, as well as oppositions one to another, *it is impossible should be true*. But yet all those Propositions, how remote soever from Reason, are so sacred somewhere or other, that Men, even of good Understanding in other matters, will sooner part with their Lives, and whatever is dearest to them, than suffer themselves to doubt, or others to question, the truth of them.

§. 22.

§. 22. This, however strange it may seem, is that which every days Experience confirms ; and will not, perhaps, appear, so wonderful, if we consider the *ways*, and *steps by which* it is brought about ; and how really it may come to pass, that *Doctrines*, that have been derived from no better original, than the Superstition of a Nurse, or the Authority of an old Woman, may, by length of time, and consent of Neighbours, *grow up to the dignity of Principles* in Religion or Morality. For such, who are careful (as they call it) to principle Children well, (and few there be who have not a set of those Principles for them, which they believe in) instill into the unwary, and, as yet, unprejudiced Understanding, (for white Paper receives any Characters) those Doctrines they would have them retain and profess. These being taught them as soon as they have any apprehension ; and still as they grow up, confirmed to them, either by the open Profession, or tacit Consent, of all they have to do with ; or at least by those, of whose Wisdom, Knowledge, and Piety, they have an Opinion, who never suffer those Propositions to be otherwise mentioned, but as the Basis and Foundation, on which they build either their Religion or Manners, come by these means to have the Reputation of unquestionable, self-evident, and innate Truths.

§. 23. To which we may add, That when *Men*, so instructed, are grown up, and reflect on their own Minds, they cannot find any thing more ancient there, than those Opinions which were taught them, before their Memory began to keep a Register of their Actions, or date the time when any new thing appeared to them ; and therefore make no scruple to conclude, *That those Propositions, of whose knowledge they can find in themselves no original, were certainly the impress of God and Nature upon their Minds ; and not taught them by any one else.* These they entertain and submit to, as many do to their Parents, with Veneration ; not because it is natural ; nor do Children do it, where they are not so taught, but because, having been always so educated, and having no remembrance of the beginning of this Respect, they think it is natural.

§. 24. This will appear very likely, and almost unavoidable to come to pass, if we consider the Nature of Mankind, and the Constitution of Humane Affairs : Wherein *most Men cannot live, without employing their time in the daily Labours of their Callings ; nor be at quiet in their Minds, without some Foundation or Principles to rest their Thoughts on.* There is scarce any one so floating and superficial in his Understanding, that hath not some revered Propositions, which are to him the Principles on which he bottoms his Reasonings ; and by which he judgeth of Truth and Falshood, Right and Wrong ; which some, wanting skill and leisure, and others the inclination, and some being taught, They ought not to examine ; there are few to be found, who are not exposed by their Ignorance, Laziness, Education, or Precipitancy, to *take them upon trust.*

§. 25. This is evidently the case of all Children and young Folk ; and Custom, a greater power than Nature, seldom failing to make them worship for Divine, what she hath inured them to bow their Minds, and submit their Understandings to ; it is no wonder, that grown *Men*, either perplexed in the necessary affairs of Life, or hot in the pursuit of Pleasures, should not seriously sit down to *examine their own Tenets ;* especially when one of their Principles is, That Principles ought not to be questioned. And had Men leisure, parts, and will, Who is there almost that dares to shake the foundations of all his past Thoughts and Actions, and endure to bring upon himself, the shame of having been a long time wholly in mistake and error ? Who is there hardy enough to contend

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with the reproach, which is every where prepared for those, who dare venture to dissent from the received Opinions of their Country or Party? And where is the man to be found, that can patiently prepare himself to bear the name of Whimsical, Sceptical, or Atheist, which he is sure to meet with, who does in the least scruple any of the common Opinions? And he will be much more afraid to question those Principles, when he shall think them, as most men do, the Standards set up by God in his Mind, to be the Rule and Touchstone of all other Opinions. And what can hinder him from thinking them sacred, when he finds them the earliest of all his own Thoughts, and the most revered by others?

§. 26. It is easie to imagine, how by these means it comes to pass, that Men worship the Idols have been set up in their Minds; grow fond of the Notions they have been long acquainted with there; and stamp the Characters of Divinity, upon Absurdities and Errors, become zealous Votaries to Bulls and Munkies; and contented too, fight, and die in defence of their Opinions. *Dum solos credit habendos esse Deos, quos ipse colit.* For since the reasoning Faculties of the Soul, which are almost constantly, though not always warily nor wisely employ'd, would not know how to move for want of a foundation, and footing, in most Men, who through laziness or avocation, do not; or for want of time, or true helps, or other causes, cannot penetrate into the Principles of Knowledge, and trace Truth, to its fountain and original, 'tis natural for them, and almost unavoidable, to take up with some borrowed Principles; which being reputed and presumed to be the evident proofs of other things, are thought not to need any other proof themselves. Whoever shall receive any of these into their thoughts, without due examination, but believe them, because they are to be believed, may take up from his Education, and the fashions of his Country, any absurdity for innate Principles; and by long poring on the same Objects, so dim his sight, as to take Monsters lodged in his own brain, for the Images of the Deity, and the Workmanship of his Hands.

§. 27. By this progress, how many there are, who arrive at Principles, which they believe innate, may be easily observed, in the variety of opposite Principles, held, and contended for, by all sorts and degrees of Men. And he that shall deny this to be the method, wherein most Men proceed, to the assurance they have of the unalterable truth and evidence of their Principles, will, perhaps, find it a hard matter, any other way to account for the contrary Tenets, which are firmly believed, confidently asserted, and which great numbers are ready at any time to seal with their Blood. And, indeed, if it be the privilege of innate Principles, to be received upon their own Authority, without examination, I know not what may not be believed, or how any ones Principles can be questioned. If they may, and ought to be examined, and tried, I desire to know how first and innate Principles can be tried; or at least it is reasonable to demand the marks and characters, whereby the genuine, innate Principles, may be distinguished from others; that so, amidst the great variety of Pretenders, I may be kept from mistakes, in so material a point as this. When this is done, I shall be ready to embrace such welcome, and useful, Propositions; and till then I may with modesty doubt, since I fear universal Consent, which is the only one produced, will scarce prove a sufficient mark to direct my Choice, and assure me of any innate Principles. From what has been said, I think it is past doubt, that there are no practical Principles wherein all Men agree; and therefore none innate.

CHAP.

CHAP. IV.

Other Considerations concerning innate Principles, both speculative and practical.

§. 1. **H**AD those, who would persuade us, that there are innate Principles, not taken them together in gross; but considered, separately, the parts out of which those Propositions are made, they would not, perhaps, have been so forward to believe they were innate. Since, if the *Idea's*, which made up those Truths, were not, it was impossible, that the Propositions, made up of them, should be innate, or our Knowledge of them be born with us. For if the *Idea's* be not innate, there was a time, when the Mind was without those Principles; and then, they will not be innate, but be derived from some other Original. For, where the *Idea's* themselves are not, there can be no Knowledge, no Assent, no Mental, or Verbal Propositions about them.

§. 2. If we will attently consider new born *Children*, we shall have little Reason, to think, that they bring many *Idea's* into the World with them. For, bating, perhaps, some faint *Idea's*, of Hunger, and Thirst, and Warmth, and some Pains, which they may have felt in the Womb, there is *not* the least appearance of any settled *Idea's* at all in them; especially of *Idea's*, answering the Terms, which make up those universal Propositions, that are esteemed innate Principles. One may perceive how, by degrees, afterwards *Idea's* come into their Minds; and that they get no more, nor no other, than what Experience, and the Observation of things, that come in their way, furnish them with; which might be enough to satisfy us, that they are not Original Characters, stamped on the Mind.

§. 3. *It is impossible for the same thing to be, and not to be*, is certainly (if there be any such) an innate Principle. But can any one think, or will any one say, that *Impossibility* and *Identity*, are two innate *Idea's*? Are they such as all Mankind have, and bring into the World with them? And are they those, that are the first in Children, and antecedent to all acquired ones? If they are innate, they must needs be so. Hath a Child an *Idea* of *Impossibility* and *Identity*, before it has of *White* or *Black*; *Sweet* or *Bitter*? And is it from the Knowledge of this Principle, that it concludes, that Wormwood rubb'd on the Nipple, is not the same Taste, that it used to receive from thence? Is it the actual Knowledge of *impossible est idem esse, & non esse*, that makes a Child distinguish between its Mother and a Stranger; or, that makes it fond of the one, and fly the other? Or does the Mind regulate it self, and its assent by *Idea's*, that it never yet had? Or the Understanding draw Conclusions from Principles, which it never yet knew or understood? The Names *impossibility* and *Identity*, stand for two *Idea's*, so far from being innate, or born with us, that I think it requires great Care and Attention, to form them right in our Understandings. They are so far from being brought into the World with us; so remote from the thoughts of Infancy and Childhood, that, I believe, upon Examination, it will be found, that many grown Men want them.

§. 4. If *Identity* (to instance in that alone) be a native Impression; and consequently so clear and obvious to us, that we must needs know it even from our Cradles; I would gladly be resolved, by one of Seven, or Seventy,

ty, Years old, Whether a Man, being a Creature, consisting of Soul and Body, be the same Man, when his Body is changed? Whether *Euphorbus* and *Pythagoras*, having had the same Soul, were the same Man, tho' they lived several Ages asunder? Nay, Whether the Cock too, which had the same Soul, were not the same with both of them? Whereby, perhaps, it will appear, that our *Idea of sameness*, is not so settled and clear, as to deserve to be thought *innate* in us. For if those innate *Idea's*, are not clear and distinct, so as to be universally known, and naturally agreed on, they cannot be the Subjects of universal, and undoubted Truths; but will be the unavoidable Occasion of perpetual Uncertainty. For, I suppose, every ones *Idea of Identity*, will not be the same, that *Pythagoras*, and Thousands others of his Followers, have: And which then shall be the true? Which innate? Or are there two different *Idea's of Identity*, both innate?

§. 5. Nor let any one think, that the Questions, I have here proposed, about the *Identity* of Man, are bare, empty Speculations; which if they were, would be enough to shew, That there was in the Understandings of Men *no innate Idea of Identity*. He, that shall, with a little Attention, reflect on the Resurrection, and consider, that Divine Justice shall bring to Judgment, at the last Day, the very same Persons, to be happy or miserable in the other, who did well or ill in this Life, will find it, perhaps, not easie to resolve with himself, what makes the same Man, or wherein *Identity* consists: And will not be forward to think he, and every one, even Children themselves, have naturally a clear *Idea* of it.

§. 6. Let us examine that Principle of Mathematicks, viz. *That the whole is bigger than a part*. This, I take it, is reckon'd amongst innate Principles. I am sure it has as good a Title as any, to be thought so; which yet, no Body can think it to be, when he considers the *Idea's* it comprehends in it, *Whole* and *Part*, are perfectly Relative; but the Positive *Idea's*, to which they properly and immediately belong, are Extension and Number, of which alone, *Whole* and *Part*, are, Relations. So that if *Whole* and *Part* are innate *Idea's*, Extension and Number must be so too, it being impossible to have an *Idea* of a Relation, without having any at all of the thing to which it belongs, and in which it is founded. Now, Whether the Minds of Men have naturally imprinted on them the *Idea's* of Extension and Number, I leave to be considered by those, who are the Patrons of innate Principles.

§. 7. That *God is to be worshipped*, is, without doubt, as great a Truth as any can enter into the mind of Man, and deserves the first place amongst all practical Principles. But yet, it can by no means be thought innate, unless the *Idea's* of *God*, and *Worship*, are innate. That the *Idea*, the Term *Worship* stands for, is not in the Understanding of Children, and a Character stamped on the Mind in its first Original, I think, will be easily granted, by any one, that considers how few there be, amongst grown Men, who have a clear and distinct Notion of it. And, I suppose, there cannot be any thing more ridiculous, than to say, that Children have this practical Principle innate, That *God is to be worshipped*; and yet, that they know not what that Worship of God is, which is their Duty. But to pass by this.

§. 8. If any *Idea* can be imagin'd *innate*, the *Idea of God* may, of all others, for many Reasons, be thought so; since it is hard to conceive, how there should be innate, Moral Principles, without an innate *Idea* of a *Deity*: Without a Notion of a Law-maker, it is impossible to have a Notion of a Law, and an Obligation to observe it. Besides the Atheists, taken notice

of

of amongst the Ancients, and left branded upon the Records of History, hath not Navigation discovered, in these latter Ages, whole Nations, at the Bay of *Soldania*, (α) in *Brasil*, (β) and the *Caribee* Islands, &c. amongst whom there was to be found no Notion of a God. *Nicolaus del Techo in literis, ex Paraquaria de Caaiguarum conversione hæc habet. Reperi eam gentem nullum nomen habere, quod Deum, & Hominis animam significet, nulla sacra habet, nulla Idola. Relatio triplex de rebus Indicis Caaiguarum* ^{2.} And, perhaps, if we should, with attention, mind the Lives, and Discourses of People not so far off, we should have too much Reason to fear, that many, in more civilized Countries, have no very strong, and clear Impressions of a Deity upon their Minds; and that the Complaints of Atheism, made from the Pulpits, are not without Reason. And though only some profligate Wretches own it too barefacedly now; yet, perhaps, we should hear, more than we do, of it from others, did not the fear of the Magistrate's Sword, or their Neighbour's Censure, tie up Peoples Tongues; which, were the Apprehensions of Punishment, or Shame taken away, would as openly proclaim their *Atheism*, as their Lives do.

(α) *Rhoe apud Thevenot, p. 2.*
(β) *Jo. de Lery, c. 16.*

§. 9. But had all Mankind, every where, a *Notion of a God*, (whereof yet History tells us the contrary) it would not from thence follow, that the *Idea* of him was innate. For, though no Nation were to be found without a Name, and some few dark Notions of him; yet that would not prove them to be natural Impressions on the Mind, no more than the Names of Fire, or the Sun, Heat, or Number, do prove the *Idea's* they stand for, to be innate, because the Names of those things, and the *Idea's* of them, are so universally received, and known amongst Mankind. Nor, on the contrary, is the want of such a Name, or the absence of such a Notion out of Men's Minds, any Argument against the Being of a God, any more, than it would be a Proof, that there was no Load-stone in the World, because a great part of Mankind, had neither a Notion of any such thing, nor a Name for it; or be any shew of Argument, to prove, that there are no distinct, and various species of Angels, or intelligent Beings above us, because we have no *Idea's* of such distinct species. For Men, being furnished with Words, by the common Language of their own Countries, can scarce avoid having some kind of *Idea's* of those things, whose Names, those they converse with, have occasion frequently to mention to them: and if it carry with it the Notion of Excellency, Greatness, or something extraordinary; if Apprehension and Concernment accompany it; if the Fear of absolute and irresistible Power set it on upon the Mind, the *Idea* is likely to sink deeper, and spread the farther; especially if it be such an *Idea* as is agreeable to the common light of Reason, and naturally deducible from every part of our Knowledge, as that of a God is. For the visible marks of extraordinary Wisdom and Power, appear so plainly in all the Works of the Creation, that a rational Creature, who will but seriously reflect on them, cannot miss the discovery of a *Deity*: And the influence, that the discovery of such a Being must necessarily have on the Minds of all, that have but once heard of it, is so great, and carries such a weight of Thought and Communication with it, that it seems stranger to me, that a whole Nation of Men should be any where found so brutish, as to want the Notion of a God; than that they should be without any Notion of Numbers, or Fire.

§. 10. The Name of God being once mentioned in any part of the World, to express a superior, powerful, wise, invisible Being, the suitability of such a Notion to the Principles of common Reason, and the Interest Men will always have to mention it often, must necessarily spread it

it far and wide; and continue it down to all Generations: though yet the *general reception of this Name, and some imperfect and unsteady Notions, conveyed thereby* to the unthinking part of Mankind, *prove not the Idea to be innate*; but only that they, who made the Discovery, had made a right use of their Reason, thought maturely of the Causes of things, and traced them to their Original; from whom other less considering People, having once received so important a Notion, it could not easily be lost again.

§. 11. This is all could be infer'd from the Notion of a *God*, were it to be found universally in all the Tribes of Mankind, and generally acknowledged, by Men grown to maturity in all Countries. For the generality of the acknowledging of a *God*, as I imagine, is extended no farther than that; which if it be sufficient to prove the *Idea of God, innate*, will as well prove the *Idea of Fire, innate*; since, I think, it may truly be said, That there is not a Person in the World, who has a Notion of a *God*, who has not also the *Idea of Fire*. I doubt not, but if a Colony of young Children should be placed in an Island, where no Fire was, they would certainly neither have any Notion of such a thing, nor Name for it, how generally soever it were received, and known in all the World besides; and, perhaps too, their Apprehensions, would be as far removed from any Name, or Notion of a *God*, till some one amongst them had employed his Thoughts, to enquire into the Constitution and Causes of things, which would easily lead him to the Notion of a *God*; which having once taught to others, Reason, and the natural Propensity of their own Thoughts, would afterwards propagate, and continue amongst them.

§. 12. Indeed it is urged, That it is *suitable to the goodness of God, to imprint upon the Minds of Men, Characters and Notions of himself*, and not leave them in the dark, and doubt, in so grand a Concernment; and also by that means, to secure to himself the Homage and Veneration, due from so intelligent a Creature as Man; and therefore he has done it.

This Argument, if it be of any Force, will prove much more than those, who use it, in this case, expect from it. For if we may conclude, that *God* hath done for Men, all that Men shall judge is best for them, because it is suitable to his goodness so to do, it will prove, not only, that *God* has imprinted on the minds of Men an *Idea* of himself; but that he hath plainly stamped there, in fair Characters, all that men ought to know, or believe of him, all that they ought to do in obedience to his Will; and that he hath given them a Will and Affection conformable to it. This, no doubt, every one will think it better for men, than that they should, in the dark, grope after Knowledge, as *St. Paul* tells us all Nations did after *God*, *Acts XVII. 27.* than that their Wills should clash with their Understandings, and their Appetites cross their Duty. The *Romanists* say, 'Tis best for men, and so, suitable to the goodness of *God*, that there should be an infallible Judge of Controversies on Earth; and therefore there is one: and I, by the same Reason, say, 'Tis better for men, that every man himself should be infallible. I leave them to consider, whether by the force of this Argument they shall think that every man is so. I think it a very good Argument, to say, the infinitely wise *God* hath made it so: And therefore it is best. But it seems to me a little too much Confidence of our own Wisdom, to say, *I think it best, and therefore God hath made it so*; and in the matter in Hand, it will be in vain to argue from such a Topick, that *God* hath done so, when certain Experience shews us, that he hath not. But the Goodness of *God* hath not been wanting to men without such Original Impressions of Knowledge, or *Idea's* stamped on the mind: since he
hath

hath furnished Man with those Faculties, which will serve for the sufficient discovery of all things requisite to the end of such a Being; and I doubt not but to shew, that a Man by the right use of his natural Abilities, may, without any innate Principles, attain the knowledge of a God, and other things that concern him. God having endued Man with those Faculties of knowing which he hath, was no more obliged by his Goodness, to implant those innate Notions in his Mind, than that having given him Reason, Hands, and Materials, he should build him Bridges, or Houses; which some people in the World, however of good parts, do either totally want, or are but ill provided of, as well as others are wholly without *Idea's of God*, and Principles of Morality; or at least have but very ill ones. The reason in both cases being, That they never employ'd their Parts, Faculties, and Powers, industriously that way, but contented themselves with the Opinions, Fashions, and Things of their Country, as they found them, without looking any farther. Had you or I been born at the Bay of *Soldania*, possibly our Thoughts, and Notions, had not exceeded those brutish ones of the *Hotentots* that inhabit there: And had the *Verginia* King *Apo-chancana*, been educated in *England*, he had, perhaps, been as knowing a Divine, and as good a Mathematician, as any in it. The difference between him, and a more improved *English*-man, lying barely in this, That the exercise of his Faculties, was bounded within the Ways, Modes, and Notions of his own Country, and never directed to any other, or farther Enquiries: And if he had not any *Idea* of a God, it was only because he pursued not those Thoughts that would have led him to it.

§. 13. I grant, That if there were any *Idea's* to be found imprinted on the Minds of Men, we have reason to expect, it should be the notion of his Maker, as a mark GOD set on his own Workmanship, to mind Man of his dependence and Duty; and that herein should appear the first instances of humane Knowledge. But how late is it before any such notion is discoverable in Children? And when we find it there, How much more does it resemble the Opinion, and Notion, of the Teacher, than represent the True God? He that shall observe in Children, the progress whereby their Minds attain the knowledge they have, will think, that the Objects they do first, and most familiarly converse with, are those that make the first impressions on their Understandings: Nor will he find the least footsteps of any other. It is easie to take notice, how their Thoughts enlarge themselves, only as they come to be acquainted with a greater variety of sensible Objects, to retain the *Idea's* of them in their memories; and to get the skill to compound and enlarge them, and several ways put them together. How by these means, they come to frame in their minds an *Idea* of a Deity, I shall hereafter shew.

§. 14. Can it be thought, that the *Idea's* Men have of God, are the Characters, and Marks of Himself, engraven in their Minds by his own finger, when we see, that in the same Country, under one and the same Name, Men have far different, nay, often contrary and inconsistent *Idea's*, and conceptions of him? Their agreeing in a name, or sound, will scarce prove an innate notion of Him.

§. 15. What true or tolerable notion of a Deity, could they have, who acknowledged, and worshipped hundreds? Every Deity that they owned above one, was an infallible evidence of their ignorance of Him, and a proof that they had no true notion of God, where Unity, Infinity, and Eternity, were always excluded. To which if we add their gross Conceptions of Corporiety, expressed in their Images, and Representations of their Deities; the Amours, Marriages, Copulations, Lusts, Quarrels,

rels, and other mean Qualities, attributed by them to their gods; we shall have little reason to think, that the heathen World, *i.e.* the greatest part of Mankind, had such *Idea's* of God in their Minds, as he himself, out of care, that they should not be mistaken about him, was Author of. And this universality of consent, so much argued, if it prove any native impressions, 'twill be only this: That God imprinted on the Minds of all Men, speaking the same Language, a Name for Himself, but not any *Idea*: Since those People, who agreed in the Name, had at the same time, far different apprehensions about the thing signified. If they say, That the variety of Deities worshipped by the heathen World, were but figurative ways of expressing the several Attributes of that incomprehensible Being, or several parts of his Providence: I answer, What they might be in their original, I will not here enquire; but that they were so in the Thoughts of the Vulgar, I think no body will affirm: And he that will consult the Voyage of the Bishop of Beryte, c. 13. (not to mention other Testimonies) will find, that the Theology of the *Siamites*, professedly owns plurality of Gods: Or, as the *Abbé de Choisy* more judiciously remarks, in his *Journal du Voyage de Syam*, 1777, it consists properly in acknowledging no God at all.

§. 15. If it be said, That wise Men of all Nations came to have true Conceptions, of the Unity and Infinity of the Deity, I grant it. But then this,

First, Excludes universality of Consent in any thing, but the name. for those wise Men being very few, perhaps one of a thousand, this universality is very narrow.

Secondly, It seems to me plainly to prove, That the truest and best Notions Men had of God, were not imprinted, but acquired by thought and meditation, and a right use of their Faculties: since the wise and considerate Men of the World, by a right and careful employment of their Thoughts, and Reason, attained true Notions in this, as well as other things; whilst the lazy and inconsiderate part of Men, making the far greater number, took up their Notions, by chance, from common Tradition, and vulgar Conceptions, without much beating their heads about them. And if it be a reason to think the notion of God innate, because all wise Men had it, Vertue must be thought innate; for that also wise Men have always had.

§. 16. This was evidently the case of all *Gentilism*: Nor hath even amongst Jews, Christians, and Mahometans, who acknowledge but One God, this Doctrine, and the care is taken in those Nations, to teach Men to have true notions of a G O D, prevailed so far, as to make Men to have the same, and true *Idea's* of Him. How many, even amongst us, will be found upon enquiry, to fancy him in the shape of a Man, sitting in Heaven; and to have many other absurd and unfit conceptions of him? Christians, as well as Turks, have had whole Sects owning, and contending earnestly for it, That the Deity was corporeal, and of humane shape: And though we find few now amongst us, who profess themselves *Anthropomorphites*, (though some I have met with that own it) yet, I believe, he that will make it his business, may find amongst the ignorant, and uninstructed Christians, many of that Opinion. Talk but with Country-people, almost of any Age; or young people almost any where, and you shall find, that though the Name of G O D be frequently in their mouths; yet the notions they apply this Name to, are so odd, low, and pitiful, that no body can imagine they were taught by a rational Man; much less, that they were the Characters writ by the finger of

of God Himself. Nor do I see how it derogates more from the Goodness of God, that he has given us Minds unfurnished with these *Idea's* of Himself, than that he hath sent us into the World, with Bodies unclothed; and that there is no Art or Skill born with us. For being fitted with Faculties to attain these, it is want of Industry, and Consideration in us, and not of Bounty in Him, if we have them not. 'Tis as certain, that there is a God, as that the opposite Angles, made by the intersection of two straight Lines, are equal. There was never any rational Creature, that set himself sincerely to examine the truth of these Propositions, that could fail to assent to them: Though yet it be past doubt, that there are many Men, who having not applied their Thoughts that way, are ignorant both of the one and the other. If any one think fit to call this (which is the utmost of its extent) universal Consent, such an one I easily allow: But such an universal Consent as this, proves not the *Idea* of God, no more than it does the *Idea* of such Angles, *innate*.

§. 17. Since then though the knowledge of a *GOD*, be the most natural discovery of humane Reason, yet *the Idea of him, is not innate*, as, I think, is evident from what has been said; I imagine there will be scarce any other *Idea* found, that can pretend to it: since if God had left any natural impressions on the Understanding of Men, it is most reasonable to expect it should have been some Characters of Himself, as far as our weak Capacities were capable to receive so incomprehensible and infinite an Object. But our Minds being, at first, void of that *Idea*, which we are most concerned to have, it is a strong presumption against all other innate Characters. I must own, as far as I can observe, I can find none, and would be glad to be informed by any other.

§. 18. I confess, there is another *Idea*, which would be of general use for Mankind to have, as it is of general talk as if they had it; and that is the *Idea of Substance*, which we neither have, nor can have, by *Sensation* or *Reflection*. If Nature took care to provide us any *Idea's*, we might well expect it should be such, as by our own Faculties we cannot procure to our selves: But we see on the contrary, that since by those ways, whereby other *Ideas* are brought into our Minds, this is not, We have no such clear *Idea* at all, and therefore signify nothing by the word *Substance*, but only an uncertain supposition of we know not what; *i. e.* of something whereof we have no *Idea*, which we take to be the *substratum*, or support, of those *Idea's* we do know.

§. 19. Whatever then we talk of innate, either *speculative*, or *practical*, Principles, it may, with as much probability, be said, That a Man hath a 100 *l.* sterling in his pocket, and yet deny that he hath there either Penny, Shilling, Crown, or any other Coin, out of which the Sum is to be made up; as to think, that certain Propositions are innate, when the *Idea's* about which they are, can by no means be supposed to be so. The general reception and assent that is given, doth not at all prove, that the *Idea's* expressed in them, are *innate*: For in many cases, however the *Idea's* came there, the assent to Words expressing the agreement, or disagreement, of such *Idea's*, will necessarily follow. Every one that hath a true *Idea* of God, and *Worship*, will assent to this Proposition, That God is to be worshipped, when expressed in a Language he understands: And every rational Man, that hath not thought on it to day, may be ready to assent to this Proposition to morrow; and yet millions of Men may be well supposed to want one, or both, of those *Idea's* to day: For if we will allow Savages, and most Country-people, to have *Idea's* of God and *Worship* (which conversation with them, will not make one forward to believe)

believe) yet, I think, few Children can be supposed to have those *Idea's*, which therefore they must begin to have sometime or other; and then they will also begin to assent to that Proposition, and make very little question of it ever after. But such an assent upon hearing, no more proves the *Ideas* to be innate, than it does, That one born blind (with Cataracts, which will be couched to morrow) had the innate *Ideas* of the Sun, or Light, or Saffron, or Yellow; because when his Sight is cleared, he will certainly assent to this Proposition, That the Sun is lucid, or that Saffron is yellow: And therefore if such an assent upon hearing cannot prove the *Ideas* innate, it can much less the Propositions made up of those *Ideas*. If they have any innate *Ideas*, I would be glad to be told, what, and how many they are.

§. 20. Besides what I have already said, there is another Reason, why I doubt, that neither these, nor any other Principles are innate. I that am fully perswaded, that the infinitely Wise GOD made all Things in perfect Wisdom, cannot satisfy my self, why he should be supposed to print upon the Minds of Men, some universal Principles; whereof those that are pretended innate, and concern Speculation, are of no great use; and those that concern Practice, not self-evident; and neither of them distinguishable from some other Truths, not allowed to be innate. For to what purpose should Characters be graven on the Mind, by the finger of God, which are not clearer there, than those which are afterwards introduced, or cannot be distinguish'd from? If any one thinks there are such innate *Ideas* and Propositions, which by their clearness and usefulness, are distinguishable from all that is adventitious in the Mind, and acquired, it will not be a hard matter for him to tell us, which they are; and then every one will be a fit Judge, whether they be so, or no. Since if there be such innate *Idea's* and Impressions, plainly different from all our other perceptions and knowledge, every one will find it true in himself. Of the evidence of these supposed innate Maxims, I have spoken already; of their usefulness, I shall have occasion to speak more hereafter.

§. 21. To conclude, some *Ideas* forwardly offer themselves to all mens Understandings; and some sorts of Truths result from any *Ideas*, as soon as the Mind puts them into Propositions: Other Truths require a train of *Ideas* placed in order, a due comparing of them, and deductions made with attention, before they can be discovered, and assented to. Some of the first fort, because of their general and easie reception, have been mistaken for innate: But the truth is, *Ideas* and Notions are no more born with us, than Arts and Sciences; though some of them, indeed, offer themselves to our Faculties, more readily than others; and therefore are more generally received; though that too, be according as the Organs of our Bodies, and Powers of our Minds, happen to be employ'd; God having fitted Men with faculties and means, to discover, observe, and retain Truths, accordingly as they are employ'd. The great difference that is to be found in the Notion of Mankind, is, from the different use they put their Faculties to, whilst some (and those the most) taking things upon trust, misemploy their power of Assent, by lazily enslaving their Minds, to the Dictates and Dominion of others, in Doctrines, which it is their Duty carefully to examine; and not blindly, with an implicit faith, to swallow: Others employing their Thoughts only about some few things, grow acquainted sufficiently with them, attain great degrees of knowledge in them, and are ignorant of all other, having never let their Thoughts loose, in the search of other Enquiries. Thus, that the three Angles of a Triangle are equal to two Right ones, is a Truth, as certain as any thing can be; and I think more evident, than many of those Propositions that go for Principles; and yet

yet there are millions, however expert in other things, know not this at all, because they never set their Thoughts on work about such Angles: And he that certainly knows this Proposition, may yet be utterly ignorant of the truth of other Propositions, in Mathematicks it self, which are as clear and evident as this; because, in his search of those mathematical Truths, he stopp'd his Thoughts short, and went not so far. The same may happen concerning the notions we have of the Being of a Deity; for though there be no Truth, which a Man may more evidently make out to himself, than the Existence of a God, yet he that shall content himself with things, as he finds them, in this World, as they minister to his Pleasures and Passions, and not make enquiry a little farther into their Causes, Ends, and admirable Contrivances, and pursue the thoughts thereof with diligence and attention, may live long without any notion of such a Being: And if any Person hath, by talk, put such a notion into his head, he may, perhaps, believe it: But if he hath never *examined* it, his knowledge of it will be no perfecter, than his, who having been told, that the three Angles of a Triangle, are equal to two Right ones, takes it upon trust, without examining the demonstration; and may yield his assent as to a probable Opinion, but hath no knowledge of the truth of it; which yet his Faculties, if carefully employ'd, were able to make clear and evident to him. But this only by the by, to shew how much our *knowledge depends upon the right use of those powers Nature hath bestowed upon us*, and how little upon those innate Principles; which are in vain supposed to be in all Mankind, for their direction; which all Men could not but know, if thy were there, or else they would be there to no purpose.

§. 22. What censure, doubting thus of innate Principles, may deserve from Men who will be apt to call it, Pulling up the old foundation of Knowledge and Certainty, I cannot tell: I persuade my self, at least, that the way I have pursued, being conformable to Truth, lays those foundations surer. This I am certain, I have not made it my business, either to quit, or follow, any Authority in the ensuing Discourse: Truth has been my only aim; and where-ever that has appeared to lead, my Thoughts have impartially followed, without minding, whether the footsteps of any other lay that way, or no. Not that I want a due respect to other Mens Opinions; but after all, the *greatest reverence is due to Truth*; and, I hope, it will not be thought arrogance, to say, That, perhaps, we should make greater progress in the discovery of rational and contemplative Knowledge, if we sought it in the Fountain, in the consideration of *Things themselves*; and made use rather of our own Thoughts, than other Mens to find it: For, I think, we may as rationally hope to see with other Mens Eyes, as to know by other Mens Understandings. So much as we ourselves consider and comprehend of Truth and Reason, so much we possess of real and true Knowledge. The floating of other mens Opinions in our brains, makes us not one jot the more knowing, though they happen to be true. What in them was Science, is in us but Opiniatry, whilst we give up our Assent, only to reverend Names, and do not, as they did, employ our own Reason to *understand* those Truths, which gave them reputation. Aristotle was certainly a knowing Man, but no body ever thought him so, because he blindly embraced, and confidently vented the Opinions of another. And if the taking up of another's Principles, without examining them, made not him a Philosopher, I suppose it can make no body else so. In the Sciences, every one has so much as he really knows and comprehends: What he believes only, and takes upon trust, are but threads; which however well in the whole piece, make no considerable

addition to his stock, who gathers them. Such borrowed Wealth, like Fairy-money, though it were Gold in the hand from which he received it, will be but Leaves and Dust when it comes to use.

§. 23. When Men have found some general Propositions that could not be doubted of, as soon as understood, it was, I know, a *short and easie way to conclude them innate*. This being once received, it eased the lazy from the pains of search, and stopp'd the enquiry of the doubtful, concerning all that was once stiled innate: And it was of no small advantage to those who affected to be Masters and Teachers, to make this the Principle of *Principles*, That Principles must not be questioned: For having once established this Tenet, That there are innate Principles, it put their Followers upon a necessity of receiving some Doctrines as such, which was to take them off from the use of their own Reason and Judgment, and put them upon believing and taking them upon trust, without farther examination: In which posture of blind Credulity, they might be more easily governed by, and made useful to some sort of Men, who had the skill and office to principle and guide them. Nor is it a small power it gives one Man over another, to have the Authority to be the Dictator of Principles, and Teacher of unquestionable Truths; and to make a man swallow that for an innate Principle, which may serve to his purpose who teacheth them. Whereas had they examined the ways, whereby men came to the knowledge of many universal *Truths*, they would have found them to result in the Minds of men, from the being of things themselves, when duely considered; and that they were discovered by the application of those Faculties, that were fitted by Nature to receive and judge of them, when duely employ'd about them.

§. 24. *To shew how the Understanding proceeds herein, is the design of the following Discourse*; which I shall proceed to, when I have first premised, that hitherto to clear my way to those foundations, which, I conceive are the only true ones, whereon to establish those Notions we can have of our own Knowledge, it hath been necessary for me to give you an account of the Reasons I had to doubt of innate Principles: And since the Arguments which are against them, do, some of them, rise from common received Opinions, I have been forced to take several things for granted, which is hardly avoidable to any one, whose Task it is to shew the falshood, or improbability, of any Tenet; it happening in Controversial Discourses, as it does in assaulting of Towns; where, if the ground be but firm, whereon the Batteries are erected, there is no farther enquiry of whom it is borrowed, nor whom it belongs to, so it affords but a fit rise for the present purpose. But in the future part of this Discourse, designing to raise an Edifice uniform, and consistent with it self, as far as my own Experience and Observation will assist me, I hope, to lay the foundation so, that the rest will easily depend upon it: And I shall not need to shore it up with props and buttresses, leaning on borrowed or begg'd foundations: Or at least, if mine prove a Castle in the Air, I will endeavour it shall be all of a piece, and hang together. Wherein I tell you before-hand, you are not to expect undeniable, cogent demonstrations, unless you will suffer me, as others have done, to take my Principles for granted; and then, I doubt not, but I can demonstrate too. All that I shall say for the Principles I proceed on, is, that I can only appeal to mens own unprejudiced *Experience*, and Observations, whether they be true, or no; and this is enough for a man who professes no more, than to lay down candidly and freely his own Conjectures, concerning a Subject not very obvious, without any other design, than an unbiass'd enquiry after Truth.

BOOK II.

CHAP. I.

Of Ideas in general, and their Original.

§. 1. **E**VERY Man being conscious to himself, That he thinks, and that which his Mind is employ'd about whilst thinking, being the *Ideas*, that are there, 'tis past doubt, that Men have in their Minds several *Ideas*, such as are those expressed by the words, *Whiteness, Hardness, Sweetness, Thinking, Motion, Man, Elephant, Army, Drunkenness*, and others: It is in the first place then to be enquired, How he comes by them? I know it is a received Doctrine, That Men have native *Ideas*, and original Characters stamped upon their Minds, in their very first being. This Opinion I have at large examined already; and, I suppose, what I have said in the fore-going Book, will be much more easily admitted, when I have shewed, whence the Understanding may get all the *Ideas* it has, and by what ways and degrees they may come into the Mind; for which I shall appeal to every ones own Observation and Experience.

§. 2. Let us then suppose the Mind to be, as we say, white Paper, void of all Characters, without any *Ideas*; How comes it to be furnished? Whence comes it by that vast store, which the busie and boundless Fancy of Man has painted on it, with an almost endless variety? Whence has it all the materials of Reason and Knowledge? To this I answer, in one word, From *Experience*: In that, all our Knowledge is founded; and from that it ultimately derives it self. Our Observation employ'd either about *external, sensible Objects*; or about the *internal Operations of our Minds, perceived and reflected on by our selves*, is that, which supplies our Understandings with all the materials of thinking. These two are the Fountains of Knowledge, from whence all the *Ideas* we have, or can naturally have, do spring.

§. 3. First, Our Senses, conversant about particular, sensible Objects, do convey into the Mind, several distinct *Perceptions* of things, according to those various ways, wherein those Objects do affect them: And thus we come by those *Ideas*, we have of *Tellow, White, Heat, Cold, Soft, Hard, Bitter, Sweet*, and all those which we call sensible qualities. This great Source, of most of the *Ideas* we have, depending wholly upon our Senses, and derived by them to our Understanding, I call *SENSATION*.

§. 4. Secondly, The other Fountain, from which Experience furnisheth the Understanding with *Ideas*, is the *Perception of the Operations of our own Minds* within us, as it is employ'd about the *Ideas* it has got; which Operations, when the Soul comes to reflect on, and consider, do furnish the Understanding with another sett of *Ideas*, which could not be had from things without; and such are, *Perception, Thinking, Doubting, Believing, Reasoning,*

soning, Knowing, Willing, and all the different actings of our own Minds ; which we being conscious of, and observing in our selves, do from these receive into our Understanding, as distinct *Ideas*, as we do from Bodies affecting our Senses. This Source of *Ideas*, every Man has wholly in himself: And though it be not Sense, as having nothing to do with external Objects ; yet it is very like it, and might properly enough be call'd internal Sense. But as I call the other *Sensation*, so I call this *REFLECTION*, the *Ideas* it affords being such only, as the Mind gets by reflecting on its own Operations within it self. By *REFLECTION* then, in the following part of this Discourse, I would be understood to mean, that notice which the Mind takes of its own Operations, and the manner of them, by reason whereof, there come to be *Ideas* of these Operations in the Understanding. These two, I say, *viz.* External, Material things, as the Objects of *SENSATION*; and the Operations of our own Minds within, as the Objects of *REFLECTION*, are, to me, the only Originals, from whence all our *Idea's* take their beginnings. The term *Operations* here, I use in a large sence, as comprehending not barely the Actions of the Mind about its *Ideas*, but some sort of Passions arising sometimes from them, such as is the satisfaction or uneasiness arising from any thought.

§. 5. The Understanding seems to me, not to have the least glimmering of any *Ideas*, which it doth not receive from one of these two: *Eternal Objects furnish the Mind with the Ideas of sensible qualities*, which are all those different perceptions they produced in us: And the *Mind furnishes the Understanding with Ideas of its own Operations*. These, when we have taken a full survey of them, and their several modes, and the Compositions made out of them, we shall find to contain all our whole stock of *Ideas*; and that we have nothing in our Minds, which did not come in, one of these two ways. Let any one examine his own Thoughts, and thoroughly search into his Understanding, and then let him tell me, Whether all the original *Ideas* he has there, are any other than of the Objects of his *Senses*, or of the Operations of his Mind, considered as Objects of his *Reflection*: and how great a mass of Knowledge soever he imagines to be lodged there, he will, upon taking a strict view, see that he has *not any Idea in his Mind, but what one of those two have imprinted*; though, perhaps, with infinite variety compounded and enlarged, by the Understanding, as we shall see hereafter.

§. 6. He that attentively considers the state of a *Child*, at his first coming into the World, will have little reason to think him stored with plenty of *Ideas*, that are to be the matter of his future Knowledge. 'Tis by degrees he comes to be furnished with them: And though the *Ideas* of obvious and familiar qualities, imprint themselves, before the Memory begins to keep a Register of Time and Order, yet 'tis often so late before some unusual qualities come in the way, that there are few Men that cannot recollect the beginning of their acquaintance with them: And if it were worth while, no doubt a Child might be so ordered, as to have but a very few, even of the ordinary *Ideas*, till he were grown up to a Man. But being surrounded with Bodies, that perpetually and diversly affect us, variety of *Idea's*, whether care be taken about it, or no, are imprinted on the Minds of Children. *Light, and Colours*, are busie and at hand everywhere, when the Eye is but open; *Sounds*, and some *tangible Qualities*, fail not to sollicit their proper Senses, and force an entrance to the Mind; but yet, I think, it will be granted easily, That if a Child were kept in a place, where he never saw any other but Black and White, till he were a Man,

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he would have no more *Ideas* of Scarlet or Green, than he that from his Childhood never tasted an Oyſter, or a Pine-Apple, has of thoſe particular Reliſhes.

§. 7. Men then come to be furniſhed, with fewer or more ſimple *Ideas* from without, according as the *Objects*, they converſe with afford greater or leſſer variety ; and from the Operation of their Minds within, according as they more or leſs reflect on them. For, though he that contemplates the Operations of his Mind, cannot but have plain and clear *Ideas* of them ; yet unleſs he turn his Thoughts that way, and conſiders them attentively, he will no more have clear and diſtinct *Ideas* of all the Operations of his Mind, and all that may be obſerved therein, than he will have all the particular *Ideas* of any Landſcape, or of the Parts and Motions of a Clock, who will not turn his Eyes to it, and with attention heed all the Parts of it. The Picture, or Clock may be ſo placed, that they may come in his way every Day ; but yet he will have but a confuſed *Idea* of all the Parts they are made up of, till he applies himſelf with attention, to conſider them each in particular.

§. 8. And hence we ſee the Reaſon, why 'tis pretty late before moſt Children get *Ideas* of the Operations of their own Minds ; and ſome have not any very clear, or perfect *Ideas* of the greateſt part of them all their Lives. Becauſe, though they paſs there continually ; yet like floating Viſions, they make not deep Impreſſions enough, to leave in the Mind clear and diſtinct, laſting *Ideas*, till the Underſtanding turn inwards upon its ſelf, and reflect on its own Operations, and make them the Object of its own Contemplation. Whereas Children at their firſt coming into the World, ſeek particularly after nothing, but what may eaſe their Hunger, or other Pain : but take all other Objects as they come, are generally pleaſed with all new ones, that are not painful ; and ſo growing up in a conſtant attention to outward Senſations, ſeldom make any conſiderable Reflection on what paſſes within them, till they come to be of riper Years ; and ſome ſcarce ever at all.

§. 9. To aſk, at what time a Man has firſt any *Ideas*, is to aſk, when he begins to perceive, having *Ideas* and Perception being the ſame thing. I know it is an Opinion, that the Soul always thinks, and that it has the actual Perception of *Ideas* in its ſelf conſtantly, as long as it exiſts ; and that actual thinking is as inſeparable from the Soul, as actual Extension is from the Body ; which if true, to enquire after the beginning of a Man's *Idea's*, is the ſame, as to enquire after the beginning of his Soul. For by this Account, Soul and *Ideas*, as Body and Extension, will begin to exiſt both at the ſame time.

§. 10. But whether the Soul be ſuppoſed to exiſt antecedent to, or coeval with, or ſome time after the firſt Rudiments of Organifation, or the beginnings of Life in the Body, I leave to be diſputed by thoſe, who have better thought of that matter. I confeſs my ſelf, to have one of thoſe dull Souls, that doth not perceive it ſelf always to contemplate its *Ideas*, nor can conceive it any more neceſſary for the Soul always to think, than for the Body always to move: the perception of *Idea's*, being (as I conceive) to the Soul, what motion is to the Body, not its Eſſence, but Operation : And therefore, though thinking be ſuppoſed never ſo much the proper Action of the Soul ; yet it is not neceſſary, to ſuppoſe, that it ſhould be always thinking, always in Action. That, perhaps, is the Privilege of the infinite Author and Preſerver of all things, who never ſlumbers nor ſleeps ; but is not competent to any finite Being, at leaſt not to the Soul of Man. We know certainly by Experience, that we ſometimes think,

think, and thence draw this infallible Consequence, That there is something in us, that has a Power to think : But whether that Substance perpetually thinks, or no, we can be no farther assured, than Experience informs us. For to say, that actual thinking is essential to the Soul, and inseparable from it, is, to beg what is in Question, and not to prove it by Reasons ; which is necessary to be done, if it be not a self-evident Proposition. But whether this, *That the Soul always thinks*, be a self-evident Proposition, that every Body assents to at first hearing, I appeal to Mankind.

§. 11. I grant that the Soul in a waking Man is never without thought, because it is the condition of being awake : But whether sleeping without dreaming be not an Affection of the whole Man, Mind as well as Body, may be worth a waking Man's Consideration ; it being hard to conceive, that any thing should think, and not be conscious of it. If the Soul doth think in a sleeping Man, without being conscious of it, I ask, whether, during such thinking, it has any Pleasure or Pain, or be capable of Happiness or Misery ? I am sure the Man is not, no more than the Bed or Earth he lies on. For to be happy or miserable without being conscious of it, seems to me utterly inconsistent and impossible. Or if it be possible, that the Soul can, whilst the Body is sleeping, have its Thinking, Enjoyments, and Concerns ; its Pleasure or Pain apart, which the Man is not conscious of, nor partakes in, It is certain, that *Socrates* asleep, and *Socrates* awake, is not the same Person ; but his Soul when he sleeps, and *Socrates* the Man, consisting of Body and Soul when he is waking, are two Persons : Since waking *Socrates*, has no Knowledge of, or Concernment for that Happiness, or Misery of his Soul, which it enjoys alone by it self whilst he sleeps, without perceiving any thing of it, no more than he has for the Happiness, or Misery of a Man in the *Indies*, whom he knows not. For if we take wholly away all Consciousness of our Actions and Sensations, especially of Pleasure and Pain, and the concernment that accompanies it, it will be hard to know wherein to place personal Identity.

§. 12. The Soul, during sound Sleep, thinks, say these Men. *Whilst it thinks* and perceives, it is capable certainly of those of Delight or Trouble, as well as any other Perceptions ; and it must necessarily be conscious of its own Perceptions. But it has all this a-part : The sleeping Man, 'tis plain, is conscious of nothing of all this. Let us suppose then the Soul of *Castor*, whilst he is sleeping, retired from his Body, which is no impossible Supposition for the Men I have here to do with, who so liberally allow Life, without a thinking Soul to all other Animals. These Men cannot then judge it is impossible, or a contradiction, That the Body should live without the Soul ; nor that the Soul subsists and thinks, or has Perception, even Perception of Happiness or Misery, without the Body. Let us then, as I say, suppose the Soul of *Castor* separated, during his Sleep, from his Body, to think apart. Let us suppose too, that it chooses for its Scene of Thinking, the Body of another Man, *v.g.* *Pollux*, who is sleeping without a Soul : For if *Castor's* Soul, can think whilst *Castor* is asleep, what *Castor* is never conscious of, 'tis no matter what Place it chooses to think in. We have here then the Bodies of two Men with only one Soul between them, which we will suppose to sleep and wake by turns ; and the Soul still thinking in the waking Man, whereof the sleeping Man is never conscious, has never the least Perception. I ask then, Whether *Castor* and *Pollux*, thus, with only one Soul between them, which thinks and perceives in one, what the other is never conscious of, nor is not concerned for, are not two as distinct Persons, as *Castor* and *Hercules* ; or, as *Socrates*, and *Plato* were ?

were? And whether one of them might not be very happy, and the other very miserable? Just by the same reason, they make the Soul and the Man two persons, who make the Soul think apart, what the Man is not conscious of. For, I suppose, nobody will make Identity of persons, to consist in the Soul's being united to the very same numerical particles of matter: For if that be necessary to Identity, 'twill be impossible, in that constant flux of the particles of our Bodies, that any Man should be the same person, two days, or two moments together.

§. 13. Thus, methinks, every drowsie nod shakes their Doctrine, who teach, That the Soul is always thinking. Those, at least, who do at any time *sleep without dreaming*, can never be convinced, That their Thoughts are sometimes for four hours busie without their knowing of it; and if they are taken in the very act, waked in the middle of that sleeping contemplation, can give no manner of account of it.

§. 14. 'Twill perhaps be said, That the *Soul thinks*, even in the soundest Sleep, but the *Memory retains it not*. That the Soul in a sleeping Man should be this moment busie a thinking, and the next moment in a waking Man, not remember, nor be able to recollect one jot of all those Thoughts, is very hard to be conceived, and would need some better Proof than bare Assertion to make it be believed. For who can without any more ado, but being barely told so, imagine, That the greatest part of Men, do, during all their Lives, for several hours every Day, think of something, which if they were asked, even in the middle of these Thoughts, they could remember nothing at all of? Most Men, I think, pass a great part of their Sleep without dreaming. I once knew a Man, that was bred a Scholar, and had no bad Memory, who told me, he had never dream'd in his Life, till he had that Fever, he was then newly recovered of, which was about the Five or Six and Twentieth Year of his Age. I suppose the World affords more such Instances: At least every ones Acquaintance, will furnish him with Examples enough of such, as pass most of their Nights without dreaming.

§. 15. *To think often, and never to retain it so much as one moment, is a very useless sort of thinking*: and the Soul in such a state of thinking, does very little, if at all, excel that of a Looking-glass, which constantly receives variety of Images, or *Ideas*, but retains none; they disappear and vanish, and there remain no footsteps of them; the Looking-glass is never the better for such *Ideas*, nor the Soul for such Thoughts. Perhaps it will be said, that in a waking Man, the materials of the Body are employ'd, and made use of, in thinking; and that the memory of Thoughts, is retained by the impressions that are made on the Brain, and the traces there left after such thinking; but that in the *thinking of the Soul*, which is not perceived in a sleeping Man, there the Soul thinks apart, and making no use of the Organs of the Body, leaves no impressions on it, and consequently no memory of such Thoughts. Not to mention again the absurdity of two distinct Persons, which follows from this Supposition, I answer farther, That whatever *Ideas* the Mind can receive, and contemplate without the help of the Body, it is reasonable to conclude, it can retain without the help of the Body too, or else the Soul, or any separate Spirit, will have but little advantage by thinking. If it has no memory of its own Thoughts; if it cannot record them for its use, and be able to recall them upon any occasion; if it cannot reflect upon what is past, and make use of its former Experiences, Reasonings, and Contemplations, to what purpose does it think? They who make the Soul a thinking Thing, at this rate will not make it a much more noble Being, than those do, whom they

condemn for allowing it to be nothing but the subtlest parts of Matter. Characters drawn on Dust, that the first breath of wind effaces; or Impressions made on a heap of Atoms, or animal Spirits, are altogether as useful, and render the Subject as noble, as the Thoughts of a Soul that perish in thinking; that once out of sight, are gone for ever, and leave no memory of themselves behind them. Nature never makes excellent things, for mean or no uses: and it is hardly to be conceived, that our infinitely wise Creator, should make so admirable a Faculty, as the power of Thinking, that Faculty which comes nearest the Excellency of his own incomprehensible Being, to be so idly and uselessly employ'd, at least $\frac{1}{2}$ part of its time here, as to think constantly, without remembring any of those Thoughts, without doing any good to its self or others, or being any way useful to any other part of the Creation. If we will examine it, we shall not find, I suppose, the motion of dull and senseless matter, any where in the Universe, made so little use of, and so wholly thrown away.

§. 16. 'Tis true, we have sometimes instances of Perception, whilst we are *asleep*, and retain the memory of those *Thoughts*: but how *extravagant* and incoherent for the most part they are; how little conformable to the Perfection and Order of a rational Being, those who are acquainted with Dreams, need not be told. This I would willingly be satisfied in, Whether the Soul, when it thinks thus apart, and as it were separate from the Body, acts less rationally then, when conjointly with it, or no: If its separate Thoughts be less rational, then these Men must say, That the Soul owes the perfection of rational thinking to the Body: If it does not, 'tis a wonder that our Dreams should be, for the most part, so frivolous and irrational; and that the Soul should retain none of its more rational Soliloquies and Meditations.

§. 17. Those who so confidently tell us, That the Soul always actually thinks, I would they would also tell us, what those *Ideas* are, that are in the Soul of a Child, before, or just at the union with the Body, before it hath received any by *Sensation*. The *Dreams* of sleeping Men, are, as I take it, all *made up of the waking Man's Ideas*, though, for the most part, oddly put together. 'Tis strange, if the Soul has *Ideas* of its own, that it derived not from *Sensation* or *Reflection*, (as it must have, if it thought before it received any impressions from the Body) that it should never, in its private thinking, (so private, that the Man himself perceives it not) retain any of them, the very moment it wakes out of them, and then make the Man glad with new discoveries. Who can find it reason, that the Soul should, in its retirement, during sleep, have so many hours thoughts, and yet never light on any of those *Ideas* it borrowed not from *Sensation* or *Reflection*, or at least preserve the memory of none, but such, which being occasioned from the Body, must needs be less natural to a Spirit? 'Tis strange, the Soul should never once in a Man's whole life, recal over any of its pure, native Thoughts, and those *Ideas* it had before it borrowed any thing from the Body; never bring into the waking Man's view, any other *Ideas*, but what have a tangle of the Cask, manifestly derive their Original from that union. If it always thinks, and so had *Ideas* before it was united, or before it received any from the Body, 'tis not to be supposed, but that during sleep, it recollects its native *Ideas*, and during that retirement from communicating with the Body, whilst it thinks by it self, the *Ideas* it is busied about, should be sometimes, at least those more natural and congenial ones had in it self, underived from the Body, or its own operations about them, which since the waking Man never remembers, we must from this Hypothesis conclude, that Memory belongs only

only to *Ideas*, derived from the Body, and the Operations of the Mind about them, or else that the Soul remembers something that the Man does not.

§. 18. I would be glad also to learn from these men, who so confidently pronounce, that the humane Soul, or, which is all one, that a man always thinks, how they come to know it; nay, *how they come to know that they themselves think, when they themselves do not perceive it.* This, I am afraid, is to be sure, without proofs; and to know, without perceiving: 'Tis, I suspect, a confused Notion, taken up to serve an Hypothesis; and none of those clear Truths, that either their own Evidence force us to admit, or common Experience makes it impudence to deny. For the most that can be said of it, is, That 'tis possible the Soul may always think, but not always retain it in memory: And, I say, it is as possible, that the Soul may not always think; and much more probable, that it should sometimes not think, than that it should often think, and that a long while together, and not be conscious to it self the next moment after, that it had thought.

§. 19. To suppose the Soul to think, and the Man not perceive it, is, as has been said, to make two persons in one man: And if one consider well these mens way of speaking, one shall be lead into a suspicion, that they do so. For they who tell us, that the Soul always thinks, do never, that I remember, say, That a man always thinks. Can the Soul think, and not the Man? Or a Man think, and not be conscious of it? This, perhaps, would be suspected of *Jargon* in others. If they say, The man thinks always, but is not always conscious of it; they may as well say, His Body is extended, without having parts. For 'tis altogether as intelligible to say, that any thing is extended without parts, as that any thing *thinks, without being conscious of it*; without perceiving, that it does so. They who talk thus, may, with as much reason, if it be necessary to their Hypothesis, say, That a man is always hungry, but that he does not always feel it: Whereas hunger consists in that very sensation, as thinking consists in being conscious that one thinks. If they say, That a man is always conscious to himself of thinking; I ask, How they know it? Consciousness is the perception of what passes in a man's own mind. Can another man perceive, that I am conscious of any thing, when I perceive it not my self? No man's Knowledge here, can go beyond his Experience. Wake a man out of a sound sleep, and ask him, What he was that moment thinking on. If he himself be conscious of nothing he then thought on, he must be a notable Diviner of Thoughts, that can assure him, that he was thinking: May he not with more reason assure him, he was not asleep? This is something beyond Philosophy; and it cannot be less than Revelation, that discovers to another, Thoughts in my mind, when I can find none there my self: And they must needs have a penetrating sight, who can certainly see, that I think, when I cannot perceive it my self; and declare, That I do not; and yet can see, that a Dog, or an Elephant, do not think, though they give all the demonstration of it imaginable, except only telling us, that they do so. This some may suspect to be a step beyond the *Rosencrucians*; it seeming easier to make ones self invisible to others, than to make another's thoughts visible to me, which are not visible to himself. But 'tis but defining the Soul to be a substance, that always thinks, and the business is done. If such a definition be of any Authority, I know not what it can serve for, but to make many men suspect, That they have no Souls at all, since they find a good part of their Lives pass away without thinking. For no Definitions, that I know, no Suppositions of any Sect, are of force enough to destroy constant Experience; and, perhaps,

'tis the affectation of knowing beyond what we perceive, that makes so much useless dispute, and noise, in the World.

§. 20. I see no Reason therefore to believe, that the *Soul thinks before the Senses have furnished it with Ideas* to think on; and as those are increased, and retained; so it comes, by Exercise, to improve its Faculty of thinking in the several parts of it, as well as afterwards, by compounding those *Ideas*, and reflecting on its own Operations, it increases its Stock as well as Facility, in remembering, imagining, reasoning, and other modes of thinking.

§. 21. He that will suffer himself, to be informed by Observation and Experience, and not make his own Hypothesis the Rule of Nature, will find few Signs of a Soul accustomed to much thinking in a new born Child, and much fewer of any Reasoning at all. And yet it is hard to imagine, that the rational Soul should think so much, and not reason at all. And he that will consider, that Infants, newly come into the World, spend the greatest part of their time in Sleep, and are seldom awake, but when either Hunger calls for the Teat, or some Pain, (the most important of all Sensations) or some other violent *Idea*, forces the mind to perceive, and attend to it, He, I say, who considers this, will, perhaps, find Reason to imagine, That a *Fœtus in the Mother's Womb, differs not much from the State of a Vegetable*; but passes the greatest part of its time without Perception or Thought, doing very little, but sleep in a Place, where it needs not seek for Food, and is surrounded with Liquor, always equally soft, and near of the same Temper; where the Eyes have no Light, and the Ears, so shut up, are not very susceptible of Sounds; and where there is little or no variety, or change of Objects to move the Senses.

§. 22. Follow a *Child* from its Birth, and observe the alterations that time makes; and you shall find, as the mind by the Senses comes more and more to be furnished with *Ideas*, it comes to be more and more awake; thinks more, the more it has matter to think on. After some time, it begins to know the Objects, which being most familiar with it, have made lasting Impressions. Thus it comes, by degrees, to know the Persons it daily converses with, and distinguish them from Strangers; which are Instances and Effects of its coming to retain and distinguish the *Ideas* the Senses convey to it: And so we may observe, how the Mind, by degrees, improves in these, and advances to the Exercise of those other Faculties of *Enlarging, Compounding, and Abstracting* its *Ideas*, and of reasoning about them, and reflecting upon all these, of which, I shall have occasion to speak more hereafter.

§. 23. If it shall be demanded then, *When a Man begins to have any Ideas?* I think, the true Answer is, When he first has any *Sensation*. For since there appear not to be any *Ideas* in the Mind, before the Senses have conveyed any in, I conceive that *Ideas* in the Understanding, are coeval with *Sensation*; which is such an Impression or Motion, made in some part of the Body, as makes it be taken notice of in the Understanding.

§. 24. The *Impressions* then, that are made on our *Senses* by outward Objects, that are extrinsical to the Mind, and its own Operations, about these Impressions reflected on by its self, as proper Objects to be contemplated by it, are, I conceive, the *Original of all Knowledge*; and the first Capacity of Humane Intellect, is, That the Mind is fitted to receive the Impressions made on it; either, through the *Senses*, by outward Objects; or by its own Operations, when it reflects on them. This is the first
step

step a Man makes towards the Discovery of any thing, and the Ground-work, whereon to build all those Notions, which ever he shall have naturally in this World. All those sublime Thoughts, which towre above the Clouds, and reach as high as Heaven its self, take their Rise and Footing here: In all that great Extent wherein the mind wanders, in those remote Speculations, it may seem to be elevated with, it stirs not one jot beyond those *Ideas*, which *Sense* or *Reflection*, have offered for its Contemplation.

§. 25. In this Part, the *Understanding* is merely *passive*; and whether or no, it will have these Beginnings, and as it were materials of Knowledge, is not in its own Power. For the Objects of our Senses, do, many of them, obtrude their particular *Ideas* upon our minds, whether we will or no: And the Operations of our minds, will not let us be without, at least some obscure Notions of them. No Man, can be wholly ignorant of what he does, when he thinks. These *simple Ideas*, when offered to the mind, the *Understanding* can no more refuse to have, nor alter, when they are imprinted, nor blot them out, and make new ones in it self, than a mirror can refuse, alter, or obliterate the Images or *Ideas*, which the Objects set before it do therein produce. As the Bodies that surround us, do diversly affect our Organs, the mind is forced to receive the Impressions; and cannot avoid the Perception of those *Ideas*, that are annexed to them.

CHAP. II.

Of simple Ideas.

§. 1. **T**HE better to understand the Nature, Manner, and Extent of our Knowledge, one thing is carefully to be observed, concerning the *Ideas* we have; and that is, That *some* of them are *simple*, and *some* *complex*.

Though the Qualities that affect our Senses, are, in the things themselves, so united and blended, that there is no separation, no distance between them; yet 'tis plain, the *Ideas* they produce in the Mind, enter by the Senses simple and unmixed. For though the Sight and Touch often take in from the same Object, at the same time, different *Ideas*; as a Man sees at once Motion and Colour; the Hand feels Softness and Warmth in the same piece of Wax: Yet the simple *Ideas* thus united in the same Subject, are as perfectly distinct, as those that come in by different Senses. The coldness and hardness, which a Man feels in a piece of *Ice*, being as distinct *Ideas* in the Mind, as the Smell and Whiteness of a Lily; or as the taste of Sugar, and smell of a Rose: And there is nothing can be plainer to a Man, than the clear and distinct Perception he has of those simple *Ideas*; which being each in it self uncompounded, contains in it nothing but *one uniform Appearance*, or Conception in the Mind, and is not distinguishable into different *Ideas*.

§. 2. These simple *Ideas*, the Materials of all our Knowledge, are suggested and furnished to the Mind, only by those two ways above mentioned, *viz. Sensation* and *Reflection*. When the *Understanding* is once stored with these simple *Ideas*, it has the Power to repeat, compare, and unite them even to an almost infinite Variety, and so can make at Pleasure new complex

plex *Ideas*. But it is not in the Power of the most exalted Wit, or enlarged Understanding, by any quickness or variety of Thought, to *invent* or *frame* one new *simple* Idea in the Mind, not taken in by the ways before mentioned: nor can any Force of the Understanding, *destroy* those that are there. The Dominion of Man in this little World of his own Understanding, being much what the same, as it is in the great World of visible things; wherein his Power, however managed by Art and Skill, reaches no farther, than to compound and divide the Materials that are made to his Hand; but can do nothing towards the making the least Particle of new Matter, or destroying one Atome of what is already in Being. The same inability, will every one find in himself, who shall go about to fashion in his Understanding any *simple Idea*, not received in by his Senses, from external Objects, or from the Operations of his own Mind about them. I would have any one try to phantasie any Taste, which had never affected his Palate; or frame the *Idea* of a Scent, he had never smelt: And when he can do this, I will also conclude, that a blind Man hath *I-deas* of Colours, and a deaf Man true distinct Notions of sounds.

§. 3. This is the Reason why, though we cannot believe it impossible to God, to make a Creature with other Organs, and more ways to convey into the Understanding the notice of Corporeal things, than those five, as they are usually counted, which he has given to Man: Yet I think, it is *not possible*, for any one to *imagine* any other *Qualities* in Bodies, howsoever constituted, whereby they can be taken notice of, besides Sounds, Tastes, Smells, visible and tangible Qualities. And had Mankind been made with but four Senses, the Qualities then, which are the Object of the Fifth Sense, had been as far from our notice, Imagination, and Conception, as now any *belonging to a Sixth, Seventh, or Eighth Sense*, can possibly be; which, whether yet some other Creatures, in some other Parts of this vast, and stupendious Universe; may not have, will be a great Presumption to deny. He that will not set himself proudly at the top of all things; but will consider the Immensity of this Fabrick, and the great variety, that is to be found in this little and inconsiderable part of it, which he has to do with, may be apt to think, that in other Mansions of it, there may be other, and different intelligent Beings, of whose Faculties, he has as little Knowledge or Apprehension, as a worm shut up in one drawer of a Cabinet, hath of the Senses or Understanding of a Man; Such Variety and Excellency, being suitable to the Wisdom and Power of the Maker. I have here followed the common Opinion of Man's having but five Senses; though, perhaps, there may be justly counted more; but either Supposition serves equally to my present Purpose.

CHAP. III.

Of Ideas of one Sense

§. 1. **T**HE better to conceive the *Ideas*, we receive from Sensation, it may not be amiss for us to consider them, in reference to the different ways, whereby they make their Approaches to our Minds, and make themselves perceivable by us.

First then, There are some, which come into our Minds *by one Sense* only.

Secondly, There are others, that convey themselves into the Mind *by more Senses than one*.

Thirdly, Others that are had from *Reflection* only.

Fourthly, There are some that make themselves way, and are suggested to the Mind *by all the ways of Sensation and Reflection*.

We shall consider them apart under these several Heads:

First, There are *some Ideas, which have admittance only through one Sense*, which is peculiarly adapted to receive them. Thus Light and Colours, as white, red, yellow, blue; with their several Degrees or Shades, and Mixtures, as Green, Scarlet, Purple, Sea-green, and the rest, come in only by the Eyes: All kinds of Noises, Sounds, and Tones only by the Ears: The several Tastes and Smells, by the Nose and Palate. And if these Organs, or the Nerves which are the Conduits, to convey them from without to their Audience in the Brain, the Mind's Prefence-Room (as I may so call it) are any of them so disordered, as not to perform their Functions, they have no Postern to be admitted by; no other way to bring themselves into view, and be perceived by the Understanding.

The most considerable of those, belonging to the Touch, are Heat and Cold, and Solidity; all the rest, consisting almost wholly in the sensible Configuration, as smooth and rough; or else more, or less firm adhesion of the Parts, as hard and soft, tough and brittle, are obvious enough.

§. 2. I think, it will be needless to enumerate all the particular *simple Ideas*, belonging to each Sense: Nor indeed is it possible, if we would, there being a great many *more* of them belonging to most of the Senses, *than we have Names for*. The variety of Smells, which are as many almost, if not more than Species of Bodies in the World, do most of them want Names. *Sweet* and *Stinking* commonly serve our turn for these *Ideas*, which in effect, is little more than to call them pleasing or displeasing; though the smell of a Rose, and Violet, both sweet, are certainly very distinct *Ideas*. Nor are the different Tastes that are in Nature, much better provided with Names. Sweet, Bitter and Sowre, Harsh and Salt, are almost all we have to denominate all the variety of Relishes, which are to be found distinct, not only in almost every sort of Creatures, but in the different Parts of the same Plant or Animal. The same may be said of Colour and Sound. I shall therefore in the account of *simple Ideas*, I am here giving, content my self to set down only such, as are most material to our present Purpose, or are in themselves less apt to be taken notice of, though they are very frequently the Ingredients of our complex *Ideas*, amongst

amongst which, I think, I may well account Solidity ; which therefore I shall treat of in the next Chapter.

CHAP. IV.

Of Solidity.

§. 1. **T**HE *Idea* of *Solidity*, we receive by our Touch ; and it arises from the Resistance we find in Body, to the entrance of any other Body into the Place it possesses, till it has left it. There is no *Idea*, which we receive more constantly from Sensation, than *Solidity*. Whether we move, or rest, in what Posture soever we are, we always feel something under us, that supports us, and hinders our farther sinking downwards ; and the Bodies we daily handle, make us perceive that whilst they remain between them, they do by an insurmountable Force, hinder the approach of the parts of our Hands that press them. That which thus hinders the approach of two Bodies, when they are moving one towards another, I call *Solidity*. I will not dispute, whether this acceptation of the Word solid be nearer to its Original Signification, than that which Mathematicians use it in : It suffices, that I think, the common Notion of Solidity will allow, if not justify, this use of it ; but if any one think it better to call it *Impenetrability*, he has my Consent. Only I have thought the Term *Solidity*, the more proper to express this *Idea*, not only because of its vulgar use in that Sense ; but also, because it carries something more of positive in it, than *Impenetrability*, which is negative ; and is, perhaps, more a consequence of *Solidity*, than *Solidity* itself. This of all other, seems the *Idea* most intimately connected with, and essential to Body, so as no where else to be found or imagin'd, but only in matter ; which though our Senses take no notice of, but in masses of matter of a bulk, sufficient to cause a Sensation in us : Yet the Mind, having once got this *Idea* from such grosser sensible Bodies, traces it farther, and considers it as well as Figure, in the minutest Particle of matter, that can exist, and finds it inseparably inherent in Body, where-ever, or however modified.

§. 2. This is the *Idea* belongs to Body, whereby we conceive it to fill space. The *Idea* of which filling of space, is, That where we imagine any space taken up by a solid Substance, we conceive it so to possess it, that it excludes all other solid Substances ; and, will for ever hinder any two other Bodies, that move towards one another in a strait Line, from coming to touch one another, unless it remove from between them in a Line, not parallel to that they move in. This *Idea* of it, the Bodies we ordinarily handle sufficiently furnish us with.

§. 3. This Resistance, whereby it keeps other Bodies out of the space it possesses, is so great, That no force, how great soever, can surmount it. All the Bodies in the World, pressing a drop of Water on all sides, will never be able to overcome the Resistance it will make, as soft as it is, to their approaching one another, till it be removed out of their way : whereby our *Idea* of *Solidity* is distinguished both from pure space, which is capable neither of Resistance nor Motion, and the ordinary *Idea* of *Hardness*. For a Man may conceive two Bodies at a distance, so as they may

may approach one another, without touching or displacing any solid thing, till their Superficies come to meet; whereby, I think, we have the clear *Idea* of Space without *Solidity*. For (not to go so far as annihilation of any particular Body) I ask, Whether a Man cannot have the *Idea* of the motion of one single Body alone, without any other succeeding immediately into its Place? which, I think, 'tis evident he can; the *Idea* of Motion in one Body, no more including the *Idea* of Motion in another, than the *Idea* of a square Figure in one Body includes the *Idea* of a square Figure in another. I do not ask, Whether Bodies do so exist, that the motion of one Body cannot really be without the motion of another? To determine this either way, is to beg the Question for or against a *Vacuum*. But my Question is, Whether one cannot have the *Idea* of one Body moved, whilst others are at rest? and I think, this no one will deny: If so, then the Place it deserted, gives us the *Idea* of pure Space without Solidity, whereinto another Body may enter, without either Resistance or Protrusion of any thing. When the Sucker in a Pump is drawn, the space it filled in the Tube is certainly the same, whether any other body follows the motion of the Sucker or no; nor does it imply a contradiction, That upon the motion of one Body, another that is only contiguous to it, should not follow it. The necessity of such a motion, is built only on the Supposition, That the World is full; but not on the distinct *Ideas* of Space and Solidity, which are as different, as Resistance and not Resistance, Protrusion and not Protrusion: And that Men have *Ideas* of Space, without Body, their very Disputes about a Vacuum plainly demonstrate, as is shewed in another Place.

§. 4. *Solidity* is hereby also *differenced from Hardness*, in that Solidity consists in repletion, and so an utter Exclusion of other Bodies out of the space it possesses: But Hardness, in a firm Cohesion of the parts of Matter, making up masses of a sensible bulk; so that the whole does not easily change its Figure. And indeed, Hard and Soft, are, as apprehended by us, only relative Terms, to the Constitutions of our Bodies; that being generally call'd hard by us, which will put us to Pain, sooner than change Figure by the pressure of any part of our Bodies; and that on the contrary, soft, which changes the Situation of its parts upon an easie and un-painful touch.

But this Difficulty of changing the Situation of the sensible parts amongst themselves, or of the Figure of the whole, gives no more Solidity to the hardest Body in the World, than to the softest; nor is an Adamant one jot more solid than Water. For though the two flat sides of two pieces of Marble, will more easily approach each other, between which there is nothing but Water or Air, than if there be an Adamant between them: yet it is not, that the parts of the Adamant are more solid than those of Water, or resist more; but because the parts of Water, being more easily separable from each other, they will by a side motion be more easily removed, and give way to the approach of the two pieces of Marble: But if they could be kept from making Place, by that side-motion, they would eternally hinder the approach of these two pieces of Marble, as much as the Diamond; and 'twould be as impossible by any force, to surmount their Resistance, as to surmount the Resistance of the parts of a Diamond. The softest Body in the World will as invincibly resist the coming together of any two other Bodies, if it be not put out of the way, but remain between them, as the hardest that can be found or imagined. He that shall fill a yielding soft Body well with Air or Water, will quickly find its Resistance: And he that thinks, that nothing but Bodies, that are

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hard

hard, can keep his Hands from approaching one another, may be pleased to make an Experiment, with the Air inclosed in a Football.

§. 5. By this *Idea* of Solidity, is the Extension of Body distinguished from the Extension of Space. The Extension of Body, being nothing but the cohesion or continuity of solid, separable, moveable Parts; and the Extension of Space, the continuity of unsolid, inseparable, and immoveable Parts. *Upon the Solidity of Bodies also, depends their mutual impulse, Resistance, and Protrusion.* Of pure Space then, and Solidity, there are several (amongst which, I confess my self one) who persuade themselves, they have clear and distinct *Ideas*; and that they can think on Space, without any thing in it, that resists, or is protruded by Body; whereof they think they have as clear an *Idea*, as of the Extension of Body, the *Idea* of the distance between the opposite Parts of a concave Superficies, being equally as clear without, as with the *Idea* of any solid Parts between; and on the other side, That they have the *Idea* of something that fills space, that can be protruded by the impulse of other Bodies, or resist their Motion. If there be others, that have not these two *Ideas* distinct, but confound them, and make but one of them, I know not, how Men, who have the same *Idea*, under different Names, or different *Ideas*, under the same Name, can, in that case, talk with one another, any more than a Man, who not being blind, or deaf, has distinct *Ideas* of the Colour of Scarlet, and the sound of a Trumpet, could discourse concerning Scarlet-Colour with the blind Man, I mention in another Place, who phansied, that the *Idea* of Scarlet was like the sound of a Trumpet.

§. 6. If any one ask me, *What this Solidity is*, I send him to his Senses to inform him: Let him put a Flint, or a Foot-ball between his Hands; and then endeavour to join them, and he will know. If he thinks this not a sufficient Explication of Solidity, what it is, and wherein it consists; I promise to tell him, what it is, and wherein it consists, when he tells me, what thinking is, or wherein it consists; or explain to me, what Extension or Motion is, which, perhaps seems much easier. The simple *Ideas* we have such, as experience teaches them us; but if beyond that, we endeavour by Words to make them clearer in the Mind, we shall succeed no better, than if we went about to clear up the Darknes of a blind Man's mind, by talking; and to discourse into him the *Ideas* of Light and Colours. The Reason of this, I shall shew in another Place.

C H A P. V.

Of simple Ideas of divers Senses.

THe *Ideas* we get by more than one Sense, are of *Space*, or *Extension*, *Figure*, *Rest*, and *Motion*: For these make perceivable impressions, both on the Eyes and Touch; and we can receive and convey into our Minds, the *Ideas* of the Extension, Figure, Motion, and Rest of Bodies, both by seeing and feeling. But having occasion to speak more at large of these, in another place, I here only enumerate them.

C H A P. VI.

Of simple Ideas of Reflection.

§. 1. **T**He Mind receiving the *Ideas*, mentioned in the foregoing Chapter, from without, when it turns its view inward upon its self, and observes its own Actions about those *Ideas* it has, takes from thence other *Ideas*, which are as capable to be the Objects of its Contemplation, as of any of those it received from foreign things.

§. 2. The two great and principal Actions of the Mind, which are most frequently considered, and which are so frequent, that every one that pleases, may take notice of in himself, are these two:

Perception, or *Thinking*; and
Volition, or *Willing*.

The power in the Mind of producing these Actions we denominate Faculties, and are called the *Understanding*, and the *Will*. Of some of the modes of these simple *Ideas* of Reflection, such as are *Remembrance*, *Discerning*, *Reasoning*, *Judging*, *Knowledge*, *Faith*, &c. I shall have occasion to speak hereafter.

C H A P. VII.

Of simple Ideas of both Sensation and Reflection.

§. 1. **T**Here be other simple *Ideas*, which convey themselves into the Mind, by all the ways of Sensation and Reflection, viz.

Pleasure, or Delight, and its opposite.

Pain, or Uneasiness.

Power.

Existence.

Unity.

§. 2. *Delight, or Uneasiness*, one or other of them join themselves to almost all our *Ideas*, both of Sensation and Reflection: And there is scarce any affection of our ~~Senses from without~~, any retired thought of our Mind within, which is not able to produce in us *pleasure, or pain*. By *Pleasure* and *Pain*, I would be understood to signifie, whatsoever delights or molests us; whether it arises from the thoughts of our Minds, or any thing operating on our Bodies. For whether we call it Satisfaction, Delight, Pleasure, Happiness, &c. on the one side; or Uneasiness, Trouble, Pain, Torment, Anguish, Misery, &c. on the other, they are still but different degrees of the same thing, and belong to the *Ideas* of Pleasure and Pain, Delight or Uneasiness; which are the names I shall most commonly use for those two sorts of *Ideas*.

§. 3. The infinitely Wise Author of our being, having given us the power over several parts of our Bodies, to move or keep them at rest, as we think fit; and also by the motion of them, to move our selves, and other contiguous Bodies, in which consists all the Actions of our Body: He having also given a power to our Minds, in several instances, to chuse amongst its *Ideas* which it will think on, and to pursue the enquiry of this or that Subject, with consideration and attention, to excite us to these Actions of thinking and motion that we are capable of, he has been pleased to join to several Thoughts, and several Sensations, a *perception of Delight*. This if it were wholly separated from all our outward Sensations, and inward Thoughts, we should have no reason to prefer one Thought or Action, to another; Negligence, to Attention; or Motion, to Rest. And so we should neither stir our Bodies, nor employ our Minds, but let our Thoughts (if I may so call it) run a drift without any direction or design, and suffer the *Ideas* of our Minds, like unregarded shadows, to make their appearances there, as it happen'd, without attending to them. In which state Man, however furnished with the Faculties of Understanding and Will, would be a very idle, unactive Creature, and pass his time only in a lazy lethargick Dream. It has therefore pleased our Wise Creator, to annex to several Objects, and the *Ideas* we receive from them, as also to several of our Thoughts, a concomitant pleasure, and that in several Objects, to several degrees, that those Faculties he had endowed us with, might not remain wholly idle, and unemploy'd by us.

§. 4. *Pain* has the same efficacy and use to set us on work, that Pleasure has, we being as ready to employ our Faculties to avoid that, as to pursue the other: Only this is worth our consideration, That it is often produced

duced by the same Objects and Ideas, that produce Pleasure in us. This their near Conjunction, which makes us often feel pain in the sensations where we expected pleasure, gives us new occasion of admiring the Wisdom and Goodness of our Maker, who designing the preservation of our Being, has annexed Pain to the application of many things to our Bodies, to warn us of the harm they will do, and as advices to withdraw from them. But he, not designing our preservation barely, but the preservation of every part and organ in its perfection, hath, in many cases, annexed pain to those very Ideas which delight us. Thus Heat, that is very agreeable to us in one degree, by a little greater increase of it, proves no ordinary torment; and the most pleasant of all sensible Objects, Light it self, if there be too much of it; if increased beyond a due proportion to our Eyes, causes a very painful sensation. Which is wisely and favourably so ordered by Nature, that when any Object does, by the vehemence of its operation, disorder the instruments of sensation, whose Structures cannot but be very nice and delicate, we might by the pain, be warned to withdraw, before the Organ be quite put out of order, and so be unfitted for its proper functions for the future. The consideration of those Objects that produce it, may well persuade us, That this is the end or use of pain. For though great light be insufferable to our Eyes, yet the highest degree of darkness does not at all disuse them: because that causing no disorderly motion in it, leaves that curious Organ unharm'd, in its natural state. But yet excess of Cold, as well as Heat, pains us: because it is equally destructive to that temper, which is necessary to the preservation of life, and the exercise of the several functions of the Body, which consists in a moderate degree of warmth; or, if you please, a motion of the insensible parts of our Bodies, confined within certain bounds.

§. 5. Beyond all this, we may find another reason why God hath scattered up and down several degrees of pleasure and pain, in all the things that environ and affect us; and blended them together, in almost all that our Thoughts and Senses have to do with; that we finding imperfection, dissatisfaction, and want of compleat happiness, in all the Enjoyments of the Creatures can afford us, might be led to seek it in the enjoyment of him, with whom there is fulness of joy, and at whose right hand are pleasures for evermore.

§. 6. Though what I have here said, may not, perhaps, make the Ideas of Pleasure and Pain clearer to us, than our own Experience does, which is the only way that we are capable of having them; yet the consideration of the Reason, why they are annexed to so many other Ideas, serving to give us due sentiments of the Wisdom and Goodness of the Sovereign Disposer of all Things, may not be unsuitable to the main end of these enquiries: The knowledge and veneration of Him, being the chief end of all our Thoughts, and the proper business of all Understandings.

§. 7. *Existence* and *Unity*, are two other Ideas, that are suggested to the Understanding, by every Object without, and every Idea within. When Ideas are in our Minds, we consider them as being actually there, as well as we consider things to be actually without us; which is, that they exist, or have *Existence*: And whatever we can consider as one thing, whether a real Being, or Idea, suggests to the Understanding, the Idea of *Unity*.

§. 8. *Power* also is another of those simple Ideas, which we receive from *Sensation* and *Reflection*. For observing in our selves, that we do, and can think; and that we can, at pleasure, move several parts of our Bodies which were at rest; the effects also, that natural Bodies are able to produce

duce in one another, occurring every moment to our Senses, we both these ways get the *Idea* of Power.

§. 9. Besides these, there is another *Idea*, which though suggested by our Senses, yet is more constantly offered us, by what passes in our own Minds; and that is the *Idea* of Succession. For if we will look immediately into our selves, and reflect on what is observable there, we shall find our *Ideas* always, whilst we are awake, or have any thought passing in train, one going, and another coming, without intermission.

§. 10. These, if they are not all, are at least (as I think) the most considerable of those *simple Ideas* which the Mind has, and out of which are made all its other knowledge; all which it receives only by the two fore-mentioned ways of *Sensation* and *Reflection*.

Nor let any one think these too narrow bounds for the capacious Mind of Man to expatiate in, which takes its flight farther than the Stars, and cannot be confined by the limits of the World; that extends its thoughts often even beyond the utmost expansion of Matter, and makes excursions into that incomprehensible *Inane*. I grant all this, but desire any one to assign any *simple Idea*, which it received not from one of those *Inlets* before-mentioned, or any *complex Idea* not made out of those *simple ones*. Nor will it be so strange, to think these few *simple Ideas* sufficient to employ the quickest Thought, or largest Capacity; and to furnish the Materials of all that various Knowledge, and more various Phantasies and Opinions of all Mankind, if we consider how many Words may be made out of the various composition of 24 Letters; or if going one step farther, we will but reflect on the variety of combinations may be made, with barely one of these *Ideas*, viz. Number, whose stock is inexhaustible, and truly infinite: And what a large and immense field, doth Excursion alone afford the Mathematicians?

C H A P. VIII.

Some farther Considerations concerning our simple Ideas.

§. 1. **C**ONCERNING the *simple Ideas* of Sensation 'tis to be considered, That whatsoever is so constituted in Nature, as to be able, by affecting our Senses, to cause any perception in the Mind, doth thereby produce in the Understanding a *simple Idea*; which, whatever be the external cause of it, when it comes to be taken notice of, by our discerning Faculty, it is by the Mind looked on and considered there, to be a real *positive Idea* in the Understanding, as much as any other whatsoever; though, perhaps, the cause of it be but a privation in the subject.

§. 2. Thus the *Idea* of Heat and Cold, Light and Darkness, White and Black, Motion and Rest, are equally clear and *positive Ideas* in the Mind; though, perhaps, some of the causes which produce them, are barely *privations* in those subjects, from whence our Senses derive those *Ideas*. These the Understanding, in its view of them, considers all as distinct *positive Ideas*, without taking notice of the causes that produce them: which is an enquiry not belonging to the *Idea*, as it is in the Understanding; but to the nature of the things existing without us. These are two very different things, and carefully to be distinguished; it being one thing to perceive,

perceive and know the *Idea* of White or Black, and quite another to examine what kind of particles they must be, and how ranged in the Superficies to make any Object appear white or black.

§. 3. A Painter, or Dyer, who never enquired into their causes, hath the *Ideas* of White and Black, and other Colours, as clearly, perfectly, and distinctly, in his Understanding, and perhaps more distinctly than the Philosopher, who hath busied himself in considering their Natures, and thinks he knows how far either of them is in its cause positive or privative; and the *Idea* of Black is no less positive in his Mind, than that of White, however the cause of that Colour in the external Object, may be only a privation.

§. 4. If it were the design of my present Undertaking, to enquire into the natural causes and manner of Perception, I should offer this as a reason, why a privative cause might, in some cases at least, produce a positive *Idea*, viz. That all Sensation being produced in us, only by different degrees and modes of Motion in our animal Spirits, variously agitated by external Objects, the abatement of any former motion, must as necessarily produce a new sensation, as the variation or increase of it; and so introduce a new *Idea*, which depends only on a different motion of the animal Spirits in that Organ.

§. 5. But whether this be so, or no, I will not here determine, but appeal to every one's own Experience, whether the shadow of a Man, though it consists of nothing but the absence of Light (and the more the absence of Light is, the more discernible is the shadow) does not, when a Man looks on it, cause as clear and positive an *Idea* in his mind, as a Man himself, though covered over with clear Sunshine? And the picture of a shadow, is a positive thing. Indeed, we have negative Names, to which there be no positive *Ideas*; but they consist wholly in negation of some certain *Ideas*, as *Silence*, *Invisible*; but these signify not any *Ideas* in the Mind, but their absence.

§. 6. And thus one may truly be said to see Darkeness. For supposing a hole perfectly dark, from whence no light is reflected, 'tis certain one may see the figure of it, or it may be painted; and whether the Ink, I write with, make any other *Idea*, is a question. The privative causes I have here assigned of positive *Ideas*, are according to the common Opinion; but in truth it will be hard to determine, whether there be really any *Ideas* from a privative cause, till it be determined, *Whether Rest be any more a privation, than Motion.*

§. 7. To discover the nature of our *Ideas* the better, and to discourse of them intelligibly, it will be convenient to distinguish them, as they are *Ideas*, or Perceptions in our Minds; and as they are in the Bodies, that cause such Perceptions in us: that some may not think (as perhaps usually is done) that they are exactly the Images and resemblances of something inherent in the subject; most of those of Sensation being in the Mind no more the likeness of something existing without us, than the Names that stand for them, are the likeness of our *Ideas*, which yet upon hearing, they are apt to excite in us.

§. 8. Whatsoever the Mind perceives in it self, or is the immediate object of Perception, Thought, or Understanding, that I call *Idea*; and the power to produce any *Idea* in our mind, I call *Quality* of the Subject wherein that power is. Thus a Snow-ball having the power to produce in us the *Ideas* of *White*, *Cold*, and *Round*, the powers to produce those *Ideas* in us, as they are in the Snow-ball, I call *Qualities*; and as they are Sensations, or Perceptions, in our Understandings, I call them *Ideas*:
which

which *Ideas*, if I speak of sometimes, as in the things themselves, I would be understood to mean those *Qualities* in the *Objects* which produce them in us.

§. 9. Concerning these *Qualities*, we may, I think, observe these *primary* ones in *Bodies*, that produce simple *Ideas* in us, *viz.* Solidity, Extension, Motion or Rest, Number and Figure.

§. 10. These, which I call *original* or *primary Qualities* of *Body*, are wholly inseparable from it; and such as in all the alterations and changes it suffers, all the force can be used upon it, it constantly keeps; and such as Sense constantly finds in every particle of Matter, which has bulk enough to be perceived, and the Mind finds inseparable from every particle of Matter, though less than to make it self singly be perceived by our Senses. *v. g.* Take a grain of Wheat, divide it into two parts, each part has still *Solidity, Extension, Figure, and Mobility*; divide it again, and it retains still the same qualities; and so divide it on, till the parts become insensible, they must retain still each of them all those qualities. For division (which is all that a Mill, or Pestle, or any other *Body*, does upon another, in reducing it to insensible parts) can never take away either *Solidity, Extension, Figure, or Mobility* from any *Body*, but only makes two distinct *Bodies*, or more, of one, which altogether after division have their certain number.

§. 11. The next thing to be considered, is, how *Bodies* operate one upon another, and that is manifestly *by impulse*, and nothing else. It being impossible to conceive, that *Body* should operate on what it does not touch, (which is all one as to imagine it can operate where it is not) or when it does touch, operate any other way than by *Motion*.

§. 12. If then *Bodies* cannot operate at a distance; if external *Objects* be not united to our Minds, when they produce *Ideas* in it; and yet we perceive these *original Qualities* in such of them, as singly fall under our Senses, 'tis evident that some motion must be thence continued by our Nerves, or animal Spirits, by some parts of our *Bodies*, to the Brains, the seat of Sensation, there to produce in our Minds the particular *Ideas* we have of them. And since the *Extension, Figure, Number, and Motion* of *Bodies* of an observable bigness, may be perceived at a distance by the sight, 'tis evident some singly imperceptible *Bodies* must come from them to the Eyes, and thereby convey to the Brain some *Motion*, which produces these *Ideas* we have of them in us.

§. 13. After the same manner, that the *Ideas* of these original *Qualities* are produced in us, we may conceive, that the *Ideas* of *secondary Qualities* are also produced, *viz. by the operation of insensible particles on our Senses*. For it being manifest, that there are *Bodies*, and good store of *Bodies*, each whereof is so small, that we cannot, by any of our Senses, discover either their bulk, figure, or motion, as is evident in the Particles of the Air and Water, and other extremely smaller than those, perhaps, as much less than the Particles of Air, or Water, as the Particles of Air, or Water, are smaller than Pease or Hail-stones. Let us suppose at present, that the different *Motions* and *Figures, Bulk, and Number* of such Particles, affecting the several *Organs* of our Senses, produce in us those different Sensations, which we have from the Colours and Smells of *Bodies*, *v. g.* a Violet, by which impulse of those insensible Particles of Matter of different figures and bulks, and in a different Degree and Modification, we may have the *Ideas* of the blue Colour, and sweet Scent of a Violet produced in our Minds. It being no more conceived impossible, to conceive, that God should annex such *Ideas* to such *Motions*, with which they have no similitude; than that he should

should annex the *Idea* of Pain to the motion of a peice of Steel, dividing our Flesh, with which that *Idea* hath no resemblance.

§. 14. What I have said concerning *Colours* and *Smells*, may be understood also of *Tastes*, and *Sounds*, and other the like sensible Qualities; which, whatever reality we by mistake attribute to them, are in truth nothing in the Objects themselves, but Powers to produce various Sensations in us, and depend on those primary Qualities, viz. Bulk, Figure, Texture, and Motion of Parts; and therefore I call them *Secondary Qualities*.

§. 15. From whence, I think, it is easie to draw this Observation, That the *Ideas* of primary Qualities of Bodies, are Resemblances of them, and their Patterns do really exist in the Bodies themselves; but the *Ideas*, produced in us by these *Secondary Qualities*, have no resemblance of them at all. There is nothing like our *Ideas*, existing in the Bodies themselves. They are in the Bodies, we denominate from them, only a Power to produce those Sensations in us: And what is Sweet, Blue, or Warm in *Idea*, is but the certain Bulk, Figure, and Motion of the insensible Parts, in the Bodies themselves we call so.

§. 16. *Flame* is denominated, *Hot* and *Light*; *Snow*, *White* and *Cold*; and *Manna*, *White*, and *Sweet*, from the *Ideas* they produce in us. Which Qualities are commonly thought to be the same in those Bodies, that those *Ideas* are in us, the one the perfect resemblance of the other, as they are in a Mirror; and it would by most Men be judged very extravagant, if one should say otherwise. And yet he that will consider, that the same *Fire*, that at one distance produces in us the Sensation of *Warmth*, does at a nearer approach, produce in us the far different Sensation of *Pain*, ought to bethink himself, what Reason he has to say, That his *Idea* of *Warmth*, which was produced in him by the *Fire*, is actually in the *Fire*; and his *Idea* of *Pain*, which the same *Fire* produced in him the same way, is not in the *Fire*. Why is Whiteness and Coldness in *Snow*, and pain not when it produces the one and the other *Idea* in us; and can do neither, but by the Bulk, Figure, Number, and Motion of its solid Parts.

§. 17. The particular Bulk, Number, Figure, and Motion of the parts of *Fire*, or *Snow*, are really in them, whether any ones Senses perceive them or no: and therefore they may be called real Qualities, they really exist in those Bodies. But *Light*, *Heat*, *Whiteness*, or *Coldness*, are no more really in them, than *Sickness* or *Pain* is in *Manna*. Take away the Sensation of them, let not the Eyes see *Light*, or *Colours*, nor the Ears hear *Sounds*; let the Palate not Taste, nor the Nose Smell, and all *Colours*, *Tastes*, *Odors*, and *Sounds*, as they are such particular *Ideas*, vanish and cease, and are reduced to their Causes, i. e. Bulk, Figure, and Motion of Parts:

§. 18. A piece of *Manna* of a sensible Bulk, is able to produce in us the *Ideas* of a round or square Figure; and by being removed from one place to another, the *Idea* of Motion. This *Idea* of Motion represents it, as it really is in the *Manna* moving: A Circle or Square are the same, whether in *Idea* or Existence; in the Mind, or in the *Manna*: And this, both Motion and Figure are really in the *Manna*, whether we take notice of them or no: This every Body is ready to agree to. Besides, *Manna* by the Bulk, Figure, Texture, and Motion of its Parts, has a Power to produce the Sensations of *Sickness*, and sometimes of acute Pains, or Gripings in us. That these *Ideas* of *Sickness* and *Pain*, are not in the *Manna*, but Effects of its Operations on us, and are no where, when we feel them not: This also every one readily agrees to. And yet Men are hardly to be

brought to think, that *Sweetness and Whiteness are not really in Manna*; which are but the effects of the operations of *Manna*, by the motion, size, and figure of its Particles on the Eyes and Palate, as the pain and sickness caused by *Manna*, are confessedly nothing but the effects of its operations on the Stomach and Guts, by the size, motion, and figure of its insensible parts; (for by nothing else can a Body operate, as has been proved:) As if it could not operate on the Eyes and Palate, and thereby produce in the Mind particular distinct *Ideas*, which in it self it has not, as well as we allow it can operate on the Guts and Stomach, and thereby produce distinct *Ideas*, which in it self it has not. These *Ideas* being all effects of the operations of *Manna*, on several parts of our Bodies, by the size, figure, number, and motion of its parts, why those produced by the Eyes and Palate, should rather be thought to be really in the *Manna*, than those produced by the Stomach and Guts; or why the pain and sickness, *Ideas* that are the effects of *Manna*, should be thought to be no-where, when they are not felt; and yet the sweetness and whiteness, effects of the same *Manna* on other parts of the Body, by ways equal as unknown, should be thought to exist in the *Manna*, when they are not seen nor tasted, would need some Reason to explain.

§. 19. Let us consider the red and white colours in *Porphyre*: Hinder light, but from striking on it, and its Colours vanish; it no longer produces any such *Ideas* in us: Upon the return of Light, it produces these appearances on us again. Can any one think any real alterations are made in the *Porphyre*, by the presence or absence of Light; and that those *Ideas* of whiteness and redness, are really in *Porphyre* in the light, when 'tis plain it *has no colour in the dark*? It has, indeed, such a Configuration of Particles, both night and day, as are apt, by the Rays of Light rebounding from some parts of that hard Stone, to produce in us the *Idea* of redness, and from others the *Idea* of whiteness: But whiteness or redness are not in it at any time, but such a texture that hath the power to produce such a sensation in us.

§. 20. Pound an Almond, and the clear white Colour will be altered in to a dirty one, and the sweet *Tast* into an oily one. What real Alteration can the beating of the Pestle make in any Body, but an Alteration of the *Texture* of it?

§. 21. *Ideas* being thus distinguished and understood, we may be able to give an Account, how the same Water, at the same time, may produce the *Idea* of Cold by one Hand, and of Heat by the other: Whereas it is impossible, that the same Water, if those *Ideas* were really in it, should at the same time be both Hot and Cold. For if we imagine *Warmth*, as it is in our Hands, to be *nothing but a certain sort and degree of Motion in the minute Particles of our Nerves, or animal Spirits*, we may understand, how it is possible, that the same Water may at the same time produce the Sensation of Heat in one Hand, and Cold in the other; which yet Figure never does, that never producing the *Idea* of a square by one Hand, which has produced the *Idea* of a Globe by another. But if the Sensation of Heat and Cold, be nothing but the increase or diminution of the motion of the minute Parts of our Bodies, caused by the Corpuscles of any other Body, it is easie to be understood, That if that motion be greater in one Hand, than in the other; if a Body be applied to the two Hands, which has in its minute Particles a greater motion, than in those of one of the Hands, and a less, than in those of the other, it will increase the motion of the one Hand, and lessen it in the other, and so cause the different Sensations of Heat and Cold, that depend thereon.

§. 22.

§. 22. I have, in what just goes before, been engaged in Physical Enquiries a little farther than, perhaps, I intended. But it being necessary, to make the Nature of Sensation a little understood, and to make the *difference between the Qualities in Bodies, and the Ideas produced by them in the Mind*, to be distinctly conceived, without which it were impossible to discourse intelligibly of them: I hope, I shall be pardoned this little Excursion into Natural Philosophy, it being necessary in our present Enquiry, to distinguish the *primary, and real Qualities* of Bodies, which are always in them, (*viz.* Solidity, Extension, Figure, Number, and Motion, or Rest, and are sometimes perceived by us, *viz.* when the Bodies they are in, are big enough singly to be discerned) from those *secondary and imputed Qualities*, which are but the Powers of several Combinations of those primary ones, when they operate, without being distinctly discerned; whereby we also may come to know what *Ideas* are, and what are not Resemblances of something really existing in the Bodies, we denominate from them.

§. 23. The *Qualities* then that are in *Bodies* rightly considered, are of *Three sorts*:

First, The *Bulk, Figure, Number, Situation, and Motion, or Rest* of their solid Parts; these are in them, whether we perceive them or no; and when they are of that size, that we can discover them, we have by these an *Idea* of the thing, as it is in it self, as is plain in artificial things. These I call *primary Qualities*.

Secondly, The *Power* that is in any Body, *by Reason of its insensible primary Qualities*, to operate after a peculiar manner on any of our Senses, and thereby *produce in us the different Ideas* of several Colours, Sounds, Smells, Tafts, &c. These are usually called *sensible Qualities*.

Thirdly, The *Power* that is in any Body, *by Reason of the particular Constitution of its primary Qualities*, to make such a *change* in the *Bulk, Figure, Texture, and Motion of another Body*, as to make it operate on our Senses, differently from what it did before. Thus the Sun has a *Power* to make Wax white, and Fire to make Lead fluid.

The First of these, as has been said, I think, may be properly called *real, Original, or primary Qualities*, because they are in the things themselves, whether they are perceived or no: and upon their different Modifications it is, that the *secondary Qualities* depend.

The other two, are only Powers to act differently upon other things, which Powers result from the different Modifications of those primary Qualities.

§. 24. But though *these two later sorts of Qualities, are Powers barely*, and nothing but Powers, relating to several other Bodies, and resulting from the different Modifications of the Original Qualities; yet they are generally otherwise thought of. For *the Second sort, viz.* The Powers to produce several *Ideas* in us by our Senses, *are, looked upon as real Qualities, in the things* thus affecting us: But *the Third sort are call'd, and esteem'd barely Powers.* *v. g.* the *Idea* of Heat, or Light, which we receive by our Eyes, or touch from the Sun, are commonly thought *real Qualities*, existing in the Sun, and something more than barely Powers in it. But when we consider the Sun, in reference to Wax, which it melts, or blanches, we look upon the Whiteness and Softness produced in the Wax, not as Qualities in the Sun, but Effects produced by Powers in it: whilst

yet we look on Light and Warmth to be *real Qualities*, something more than bare Powers in the Sun. Whereas, if rightly considered, these Qualities of Light and Warmth, which are Perceptions in me, when I am warmed, or enlighthened by the Sun, are no otherwise in the Sun, than the changes made in the Wax, when it is blanced or melted, are in the Sun. They are all of them equally Powers in the Sun, depending on its primary Qualities; whereby it is able in the one case, so to alter the Bulk, Figure, Texture, or Motion of some of the insensible parts of my Eyes, or Hands, as thereby to produce in me the *Ideas* of Light, or Heat; and in the other, it is able so to alter the Bulk, Figure, Texture, or Motion of the insensible Parts of the Wax, as to make them fit to produce in me the distinct *Ideas* of White and Fluid.

§. 25. The Reason, *Why the one are ordinarily taken for real Qualities, and the other only for bare Powers*, seems to be, because the *Ideas* we have of distinct Colours, Sounds, &c. containing nothing at all in them, of Bulk, Figure, or Motion, we are not apt to think them the Effect of these primary Qualities, which appear not to our Senses to operate in their Production; and with which, they have not any apparent Congruity, or conceivable Connexion. Hence it is, that we are so forward to imagine, that those *Ideas* are the resemblances of something really existing in the Objects themselves: Since Sensation discovers nothing of Bulk, Figure, or Motion of parts in their Production; nor can Reason shew, how Bodies by their Bulk, Figure, and Motions, should produce in the Mind the *Ideas* of Blue, or Yellow, &c. But in the other Case, in the Operations of Bodies, changing the Qualities one of another, we plainly discover, that the Quality produced, hath commonly no resemblance with any thing in the thing producing it; wherefore we look on it as a bare Effect of Power. For though receiving the *Idea* of Heat, or Light, from the Sun, we are apt to think, 'tis a Perception and Resemblance of such a Quality in the Sun: yet when we see Wax, or a fair Face, receive change of Colour from the Sun, we cannot imagine that to be the Reception, or Resemblance of any thing in the Sun, because we find not those different Colours in the Sun it self. For our Senses, being able to observe a likeness, or unlikeness of sensible Qualities in two different external Objects, we forwardly enough conclude the Production of any sensible Quality in any Subject, to be an Effect of bare Power, and not the Communication of any Quality, which was really in the efficient, when we find no such sensible Quality in the thing that produced it. But our Senses, not being able to discover any unlikeness between the *Idea* produced in us, and the Quality of the Object producing it, we are apt to imagine, that our *Ideas* are resemblances of something in the Objects, and not the Effects of certain Powers, placed in the Modification of their primary Qualities, with which primary Qualities the *Ideas* produced in us have no resemblance.

§. 26. To conclude, beside those before mentioned *primary Qualities* in Bodies, *viz.* Bulk, Figure, Extension, Number, and Motion of their solid Parts; all the rest, whereby we take notice of Bodies, and distinguish them one from another, are nothing else, but several Powers in them, depending on those primary Qualities; whereby they are fitted, either by immediately operating on our Bodies, to produce several different *Ideas* in us; or else by operating on other Bodies, so to change their primary Qualities, as to render them capable of producing *Ideas* in us, different from what before they did. The former of these, I think, may be called *Secondary Qualities, immediately perceivable*: The later, *Secondary Qualities, mediately perceivable*.

C H A P.

C H A P. IX.

Of Perception.

§. 1. **P**erception, as it is the first faculty of the Mind, exercised about our *Ideas*; so it is the first and simplest *Idea* we have from Reflection, and is by some called Thinking in general. Though Thinking, in the propriety of the *English* Tongue, signifies that sort of operation of the Mind about its *Ideas*, wherein the Mind is active; where it with some degree of voluntary attention, considers any thing. For in bare naked *Perception*, the Mind is, for the most part, only passive; and what it perceives, it cannot avoid perceiving.

§. 2. *What Perception is*, every one will know better, by reflecting on what he does himself, when he sees, hears, feels, &c. or thinks, than by any discourse of mine. Whoever reflects on what passes in himself in his own Mind, cannot miss it: And if he does not reflect, all the words in the World, cannot make him have any notion of it.

§. 3. This is certain, That whatever alterations are made in the Body, if they reach not the Mind; whatever impressions are made on the outward parts, if they are not taken notice of within, there is no Perception. Fire may burn our Bodies, with no other effect than it does a Billet, unless the motion be continued to the Brain; and there the sense of Heat, or *Idea* of Pain, be produced in the Mind, wherein consists *actual Perception*.

§. 4. How often may a Man observe in himself, that whilst his Mind is intently employ'd in the contemplation of some Objects; and curiously surveying some *Ideas* that are there, it takes no notice of impressions, of sounding Bodies, which are brought in, though the same alteration be made upon the Organ of Hearing, that uses to be for the producing the *Idea* of a Sound? A sufficient impulse there may be on the Organ; but it not reaching the observation of the Mind, there follows no perception: And though the motion that uses to produce the *Idea* of Sound, be made in the Ear, yet no sound is heard. Want of Sensation in this case, is not through any defect in the Organ, or that his Ears are less affected than at other times, when he does hear: but that which uses to produce the *Idea*, though conveyed in by the usual Organ, not being taken notice of in the Understanding, there follows no Sensation. So that *where-ever there is Sense, or Perception, there some Idea is actually produced, and present in the Understanding.*

§. 5. Therefore I doubt not but *Children*, by the exercise of their Senses about Objects, that affect them *in the Womb*, receive some few *Ideas*, before they are born, as the unavoidable effects, either of the Bodies that environ them, or else of those Wants or Diseases they suffer; amongst which, (if one may conjecture concerning things not very capable of examination) I think, the *Ideas* of Hunger and Warmth are two: which probably are some of the first that Children have, and which they scarce ever part with again.

§. 6. But though it be reasonable to imagine, that *Children* receive some *Ideas* before they come into the World, yet these simple *Ideas* are far from those innate Principles, which some contend for, and we above have rejected. These here mentioned, being the effects of Sensation, are only

only from some Affections of the Body, which happen to them there, and so depend on something exterior to the Mind; no otherwise differing in their manner of production from other *Ideas* derived from Sense, but only in the precedency of Time: Whereas those innate Principles are supposed to be of quite another nature; not coming into the Mind by the accidental alterations in, or operations on the Body; but, as it were, original Characters impressed upon it, in the very first moment of its Being and Constitution.

§. 7. As there are some *Ideas*, which we may reasonably suppose may be introduced into the Minds of Children in the Womb, subservient to the necessity of their Life, and being there: So after they are born, *those Ideas* are the *earliest imprinted, which happen to be the sensible Qualities, which first occur* to them; amongst which, Light is not the least considerable, nor of the weakest efficacy. And how covetous the Mind is, to be furnished with all such *Ideas*, as have no pain accompanying them, may be a little guess'd, by what is observable in Children new-born, who always turn their Eyes to that part, from whence the Light comes, lay them how you please. But the *Ideas* that are most familiar at first, being various, according to the divers circumstances of Childrens first entertainment in the World, the order wherein the several *Ideas* come at first into the Mind, is very various, and uncertain also; neither is it much material to know it.

§. 8. We are farther to consider concerning Perception, that the *Ideas we receive by sensation, are often in grown People alter'd by the Judgment*, without our taking notice of it. When we set before our Eyes a round Globe, of any uniform colour, *v. g.* Gold, Alabaster, or Jet, 'tis certain, that the *Idea* thereby imprinted in our Mind, is of a flat Circle variously shadow'd, with several degrees of Light and Brightness coming to our Eyes. But we having by use been accustomed to perceive, what kind of appearance convex Bodies are wont to make in us; what alterations are made in the reflexions of Light, by the difference of the sensible Figures of Bodies, the Judgment presently, by an habitual custom, alters the Appearances into their Causes: So that from that, which truly is variety of shadow or colour, collecting the Figure, it makes it pass for a mark of Figure, and frames to it self the perception of a convex Figure, and an uniform Colour; when the *Idea* we receive from thence, is only a Plain variously colour'd, as is evident in Painting.

§. 9. But this is not, I think, usual in any of our *Ideas*, but those received by *Sight*: Because Sight, the most comprehensive of all our Senses, conveying to our Minds the far different *Ideas* of Light and Colours, which are peculiar only to that Sense; and also of Space, Figure, and Motion, the several varieties whereof, change the appearances of its proper Objects, *viz.* Light and Colours, it accustoms it self by use, to judge of the one by the other. This in many cases, by a settled habit, in things whereof we have frequent experience, is performed so constantly, and so quick, that we take that for the Perception of our Sensation, which is but an *Idea* formed by our Judgment; so that one, *viz.* that of Sensation, serves only to excite the other, and is scarce taken notice of it self; as a Man who reads and hears with attention and understanding, takes little notice of the Characters, or Sounds, but of the *Ideas* that are excited in him by them.

§. 10. Nor need we wonder, that this is done with so little notice, if we consider, how very *quick* the *actions of the Mind* are performed: For as it self takes up no space, has no extension; so its actions seem to require no time, but many of them seem to be crouded into an Instant. I speak this in comparison to the actions of the Body. Any one may easily observe this in his own Thoughts, who will take the pains to reflect on them. How, as it were in an instant, does our Minds, with one glance, see all the parts of a demonstration, which may very well be called a long one, if we consider the time it will require to put it into words, and step by step shew it another? Secondly, we shall not be so much surprized, that this is done in us with so little notice, if we consider, how the facility we get of doing things, by a custom of doing, makes them often pass in us, without our notice. *Habits*, especially such as are begun very early, come, at last, to produce *actions in us, which often scape our observation*. How frequently do we, in a day, cover our Eyes with our Eyelids, without perceiving that we are at all in the dark? Men, that by custom have got the use of a By-word, do almost in every sentence, pronounce sounds; which, though taken notice of by others, they themselves neither hear, nor observe. And therefore 'tis not so strange, that our Mind should often change the *Idea* of its Sensation, into that of its Judgment, and make one serve only to excite the other, without our taking notice of it.

§. 11. This faculty of *Perception*, seems to me to be that, which *puts the distinction betwixt the animal Kingdom, and the inferior parts of Nature*. For however Vegetables have, many of them, some degrees of Motion, and upon the different application of other Bodies to them, do very briskly alter their Figures and Motions, and so have obtained the name of sensitive Plants, from a motion, which has some resemblance to that, which in Animals follows upon Sensation: Yet, I suppose, it is all bare Mechanism; and no otherwise produced, than the turning of a wild Oat-beard, by the insinuation of the Particles of Moisture; or the shortening of a Rope, by the affusion of Water. All which is done without any sensation in the Subject, or the having or receiving any *Ideas*.

§. 12. *Perception*, I believe, is, in some degree, in all sorts of *Animals*; though in some, possibly, the Avenues provided for the reception of Sensations, are so few by Nature, and the Perception, they are received with, so obscure and dull, that it comes extremely short of the quickness and variety of Sensations, which is in other Animals; but yet it is sufficient for, and wisely adapted to the state and condition of that sort of Animals, who are thus constituted by Nature: So that the Wisdom and Goodness of the Maker, plainly appears in all the Parts of this stupendious Fabrick, and all the several degrees and ranks of Creatures in it.

§. 13. We may, I think, from the Make of an *Oyster*, or *Cockle*, reasonably conclude, that it has not so many, nor so quick Senses, as a Man, or several other Animals; nor if it had, would it in that state and incapacity of transferring it self from one place to another, be better'd by them. What good would Sight and Hearing do to a Creature, that cannot move it self to or from the Objects, wherein at a distance it perceives Good or Evil? And would not quickness of Sensation, be an Inconvenience to an Animal, that must lie still, where Chance has once placed it; and there receives the afflux of colder or warmer, clean or foul Water, as it happens to come to it?

§. 14. But yet, I cannot but think, there is some small dull Perception, whereby they are distinguished from perfect Insensibility. And that this may be so, we have plain instances, even in Mankind it self. Take one, in whom decrepid old Age has blotted out the Memory of his past Knowledge, and clearly wiped out the *Ideas* his Mind was formerly stored with; and has, by destroying his Sight, Hearing, and Smell quite, and his Taste to a great degree, stopp'd up almost all the Passages for new ones to enter: Or if there be some of the inlets yet half open, the Impressions made are scarce perceived, or not at all retained, How far such an one (notwithstanding all that is boasted of innate Principles) is in his Knowledge, and intellectual Faculties, above the Condition of a Cockle, or an Oyster, I leave to be considered. And if a Man had passed Sixty Years in such a State, as 'tis possible he might, as well as three Days, I wonder what difference there would have been in any intellectual Perfections, between him and the lowest degrees of Animals.

Perception then being the first step and degree towards Knowledge, and the inlet of all the Materials of it, the fewer Senses any Man, as well as any other Creature, hath; and the fewer and duller the Impressions are that are made by them; and the duller the Faculties are, that are employed about them, the more remote are they from that Knowledge, which is to be found in some Men. But this being in great variety of Degrees, (as may be perceived amongst Men,) cannot certainly be discovered in the several Species of Animals, much less in their particular Individuals. It suffices me only to have remarked here, that Perception is the first Operation of all our intellectual Faculties, and the inlet of all Knowledge into our Minds. And I am apt too, to imagine, That it is Perception in the lowest degree of it, which puts the Boundaries between Animals, and the inferior ranks of Creatures. But this I mention only as my conjecture by the bye, it being indifferent to the Matter in Hand, which way the Learned shall determine of it.

CHAP. X.

Of Retention.

§. 1. **T**HE next Faculty of the Mind, whereby it makes a farther Progress towards Knowledge, is that I call *Retention*; or the keeping of those simple *Ideas*, which from Sensation or Reflection it hath received, which is done two ways; First, either by keeping the *Idea*, which is brought into it, for some time actually in view, which is called *Contemplation*.

§. 2. The other, is the Power to revive again in our Minds those *Ideas*, which after imprinting have disappeared, or have been as it were laid aside out of Sight: And thus we do, when we conceive Heat or Light, Yellow or Sweet, the Object being removed; and this is *Memory*, which is as it were the Store-house of our *Ideas*. For the narrow Mind of Man, not being capable of having many *Ideas* under View and Consideration at once, it was necessary to have a Repository, to lay up those *Ideas*, which at another time it might have use of. And thus it is, by the Assistance of the Memory, that we are said to have all those *Ideas* in our Understanding; which though we do not actually contemplate, yet we can bring in sight, and make appear again, and be the Objects of our Thoughts, without the help of those sensible Qualities, which first imprinted them there.

§. 3. *Attention* and *Repetition* help much to the fixing any *Ideas* in our *Memory*: But those, which naturally at first make the deepest, and most lasting Impression, are those, which are accompanied with *Pleasure* or *Pain*. The great Business of the Senses, being to make us take notice of what hurts, or advantages the Body, it is wisely ordered by Nature (as has been shewn) that Pain should accompany the Reception of several *Ideas*; which supplying the Place of Consideration and Reasoning in Children; and acting quicker than Consideration in grown Men, makes both the Young and Old avoid painful Objects, with that haste, which is necessary for their Preservation; and in both settles in the Memory a caution for the Future.

§. 4. But concerning the several degrees of lasting, wherewith *Ideas* are imprinted on the *Memory*, we may observe, First, That some of them being produced in the Understanding, either by the Objects affecting the Senses once barely, and no more, especially if the Mind then otherwise employed, took but little notice of it, and set not on the stamp deep into it self; or else, when through the Temper of the Body, or otherwise, the Memory is very weak, such *Ideas* quickly fade, and vanish quite out of the Understanding, and leave it as clear without any Foot-steps, or remaining Characters, as Shadows do flying over Fields of Corn; and the Mind is as void of them, as if they never had been there.

§. 5. Thus many of those *Ideas*, which were produced in the Minds of Children, in the beginning of their Sensation (some of which, perhaps, as of some Pleasures and Pains were before they were born, and others in their Infancy) if in the future Course of their Lives, they are not repeated again, are quite lost, without the least glimpse remaining of them. This may be observed in those, who by some Mischance have lost their

fight, when they were very young; in whom the *Ideas* of Colours, having been but slightly taken notice of, and ceasing to be repeated, do quite wear out; so that some years after, there is no more Notion, nor Memory of Colours left in their Minds, than in those of People born blind. The Memory in some Men, 'tis true, is very tenacious even, to a Miracle: But yet there seems to be a constant decay of all our *Ideas*, even those which are struck deepest, and in the Minds the most retentive; so that if they be not sometimes renewed by repeated Exercise of the Senses, or Reflection about those kind of Objects, which at first occasioned them, the Print wears out, and at last there remains nothing to be seen. Thus the *Ideas*, as well as Children of our Youth, often die before us: And our Minds represent to us those Tombs, to which we are approaching; where though the Brass and Marble remain, yet the Inscriptions are effaced by time, and the Imagery moulders away. *The Pictures drawn in our Minds, are laid in fading Colours*; and if not sometimes refreshed, vanish and disappear. How much the Constitution of our Bodies are concerned in this; and whether the Temper of the Spirits and Brain make this difference, that some retain the Characters drawn on it like Marble, others like free Stone, and others little better than Sand, I shall not here enquire, though it may seem probable, that the Constitution of the Body, does sometimes influence the Memory; since we oftentimes find a Disease quite strip the Mind of all its *Ideas*, and the flames of a Fever in a few days, calcines all those Images to dust and confusion, which seem'd to be as lasting, as if carved in Marble.

§. 6. But concerning the *Ideas* themselves, it is easie to remark, That those that are *oftenest refreshed* (amongst which are those that are conveyed into the Mind by more ways than one) by a frequent return of the Objects or Actions that produce them, *fix themselves best in the Memory*, and remain clearest and longest there; and therefore those which are of the original Qualities of Bodies, viz. *Solidity, Extension, Figure, Motion, and Rest*, and those that almost constantly affect our Bodies, as *Heat and Cold*; and those which are the Affections of all kind of Beings, as *Existence, Duration, and Number*, which almost every Object that affects our Senses, every Thought which employs our Minds, bring along with them: These, I say, and the like *Ideas*, are seldom quite lost, whilst the Mind retains any *Ideas* at all.

§. 7. In this secondary Perception, as I may so call it, or viewing again the *Ideas*, that are lodg'd in the *Memory*, *the Mind is oftentimes more than barely passive*, the appearance of those dormant Pictures, depending sometimes on the Will. The Mind very often sets it self on work in search of some hidden *Idea*, and turns, as it were, the Eye of the Soul upon it; though sometimes too they start up in our Minds of their own accord, and offer themselves to the Understanding; and very often are rouzed and tumbled out of their dark Cells, into open Day-light, by some turbulent and tempestuous Passion, our Affections bringing *Ideas* to our Memory, which had otherwise lain quiet and unregarded.

§. 8. Memory, in an intellectual Creature, is necessary in the next degree to Perception. It is of so great moment, that where it is wanting, all the rest of our Faculties are in a great measure useless: And we in our Thoughts, Reasonings, and Knowledge, could not proceed beyond present Objects, were it not for the assistance of our Memories, wherein there may be *two defects*:

First,

First, That it *loses the Idea* quite, and so far it produces perfect Ignorance. For since we can know nothing farther, than we have the *Ideas* of it, when they are gone, we are in perfect *ignorance*.

Secondly, That it moves slowly, and *retrieves not the Ideas*, that it has, and are laid up in store, *quick enough* to serve the Mind upon occasions. This, if it be to a great degree, is *Stupidity*; and he, who through this default in his Memory, has not the *Ideas*, that are really preserved there, ready at hand, when need and occasion calls for them, were almost as good be without them quite, since they serve him to little purpose. The dull Man, who loses the opportunity, whilst he is seeking in his Mind for those *Ideas*, that should serve his turn, is not much more happy in his Knowledge, than one that is perfectly ignorant. 'Tis the business therefore of the Memory, to furnish to the Mind those dormant *Ideas*, which it has present occasion for, and in the having them ready at hand on all occasions consists, that which we call *Invention*, *Fancy*, and quickness of Parts.

§. 9. This faculty of laying up, and retaining the *Ideas* that are brought into the Mind, several *other Animals* seem to have, to a great degree, as well as Man. For to pass by other instances, Birds learning of Tunes, and the endeavours one may observe in them to hit the Notes right, put it past doubt with me, that they have Perception, and retain *Ideas* in their Memories, and use them for Patterns. For it seems to me impossible, that they should endeavour to conform their Voices to Notes (as 'tis plain they do,) of which they had no *Ideas*. For tho' I should grant Sound may mechanically cause a certain motion of the animal Spirits, in the Brains of those Birds, whilst the Tune is actually playing; and that motion may be continued on to the Muscles of the Wings; and so the Bird mechanically be driven away by certain noises, because this may tend to the Birds preservation: yet that can never be supposed a Reason, why it should cause mechanically, either whilst the Tune was playing, much less after it has ceased, such a motion in the Organs of the Bird's voice, as should conform it to the Notes of a foreign Sound, which imitation can be of no use to the Birds preservation. But, which is more, it cannot with any appearance of Reason, be supposed (much less proved) that Birds without Sense and Memory, can approach their Notes nearer and nearer, by degrees, to a Tune lay'd yesterday; which if they have no *Idea* of in their Memory, is now no-where, nor can be a Pattern for them to imitate, or which any repeated Essays can bring them nearer to. Since there is no reason why the sound of a Pipe should leave traces in their Brains, which not at first, but by their after-endeavours should produce the like Sounds; and why the Sounds they make themselves, should not make traces which they should follow, as well as those of the Pipe, is impossible to conceive.

C H A P. XI.

Of Discerning, and other Operations of the Mind.

§. 1. **A**Nother Faculty we may take notice of in our Minds, is that of *Discerning* and distinguishing between the several *Ideas* it has. It is not enough to have a confused perception of something in general. Unless the Mind had a distinct perception of different Objects, and their Qualities, it would be capable of very little Knowledge, though the Bodies that affect us, were as busie about us, as they are now, and the Mind were continually employ'd in thinking. On this faculty of Distinguishing one thing from another, depends the *evidence and certainty* of several, even very general Propositions, which have passed for innate Truths; because Men over-looking the true cause, why those Propositions find universal assent, impute it wholly to native uniform Impressions; whereas it in truth *depends upon this clear discerning Faculty* of the Mind, whereby it perceives two *Ideas* to be the same, or different: But of this more hereafter.

§. 2. How much the imperfection of accurately discriminating *Ideas* one from another lies, either in the dulness, or faults of the Organs of Sense; or want of accuteness, exercise, or attention in the Understanding; or hastiness and precipitancy, natural to some Tempers, I will not here examine: It suffices to take notice, that this is one of the Operations, that the Mind may reflect on, and observe in it self. It is of that consequence to its other Knowledge, that so far as this faculty is in it self dull, or not rightly made use of, for the distinguishing one thing from another; so far our Notions are confused, and our Reason and Judgment disturbed or misled. If in having our *Ideas* in the Memory ready at hand, consists quickness of parts; in this of having them unconfused, and being able nicely to distinguish one thing from another, where there is but the least difference, consists, in a great measure, the exactness of Judgment, and clearness of Reason, which is to be observed in one Man above another. And hence, perhaps, may be given some Reason of that common Observation, That Men who have a great deal of Wit, and prompt Memories, have not always the clearest Judgment, or deepest Reason. For *Wit* lying most in the assemblage of *Ideas*, and putting those together with quickness and variety, wherein can be found any resemblance or congruity, thereby to make up pleasant Pictures, and agreeable Visions in the Fancy: *Judgment*, on the contrary, lies quite on the other side, in separating carefully *Ideas* one from another, wherein can be found the least difference, thereby to avoid being misled by Similitude, and by affinity to take one thing for another. This is a way of proceeding quite contrary to Metaphor and Allusion, wherein, for the most part, lies that entertainment and pleasantry of Wit, which strikes so lively on the Fancy; and therefore so acceptable to all People, because its Beauty appears at first sight, and there is required no labour of thought, to examine what Truth or Reason there is in it. The Mind, without looking any farther, rests satisfied with the pleasantness of the Picture, and the gayety of the Fancy: And it is a kind of an affront to go about to examine it, by the severe Rules of Truth, and good Reason;

son ; whereby it appears, that it consists in something, that is not perfectly conformable to them.

§. 3. To the well distinguishing our *Ideas*, it chiefly contributes, that they be *clear and determinate* : And when they are so, it *will not breed any confusion* or mistake about them, though the *Senses* should (as sometimes they do) convey them from the same *Object* differently, on different occasions, and so seem to err. For though a Man in a Fever, should from Sugar have a bitter taste, which at another time would produce a sweet one ; yet the *Idea* of Bitter in that Man's Mind, would be as clear and distinct from the *Idea* of Sweet, as if he had tasted only Gall. Nor does it make any more confusion between the two *Ideas* of Sweet and Bitter, that the same sort of Body produces at one time one, and at another time another *Idea*, by the taste, than it makes a confusion in the two *Ideas* of White and Sweet, or White and Round, that the same piece of Sugar produces them both in the Mind at the same time. And the *Ideas* of Orange-colour and Azure, that are produced in the Mind by the same parcel of the infusion of *Lignum Nephriticum*, are no less distinct *Ideas*, than those of the same Colours, taken from two very different Bodies.

§. 4. The *COMPARING* them one with another, in respect of Extent, Degrees, Time, Place, or any other circumstances, is another operation of the Mind about its *Ideas*, and is that upon which depends all that large tribe of *Ideas*, comprehended under *Relation* ; which of how vast an extent it is, I shall have occasion to consider hereafter.

§. 5. How far *Brutes* partake in this faculty, is not easie to determine ; I imagine they have it not in any great degree : For though they probably have several *Ideas* distinct enough, yet it seems to me to be the *Prerogative* of Humane Understanding, when it has sufficiently distinguished any *Ideas*, so as to perceive them to be perfectly different, and so consequently two, to cast about and consider in what circumstances they are capable to be compared. And therefore, I think, *Beasts compare* not their *Ideas*, farther than some sensible Circumstances annexed to the Objects themselves. The other power of Comparing, which may be observed in Men, belonging to general *Ideas*, and useful only to abstract Reasonings, we may probably conjecture *Beasts* have not.

§. 6. The next Operation we may observe in the Mind about its *Ideas*, is *COMPOSITION* ; whereby it puts together several of those simple ones it has received from Sensation and Reflection, and combines them into complex ones. Under this of Composition, may be reckon'd also that of *ENLARGING* ; wherein though the Composition does not so much appear, as in more complex ones, yet it is nevertheless a putting several *Ideas* together, though of the same kind. Thus by adding several Unites together, we make the *Idea* of a dozen ; and putting together the repeated *Ideas* of several Perches, we frame that of a Furlong.

§. 7. In this also, I suppose, *Brutes* come far short of Man. For though they take in, and retain together several Combinations of simple *Ideas*, as possibly the Shape, Smell, and Voice of his Master, make up a complex *Idea* a Dog has of him, or rather are so many distinct Marks whereby he knows him ; yet, I do not think they do of themselves ever compound them, and make complex *Ideas* : And perhaps even where we think they have complex *Ideas*, 'tis only one simple one that directs them in the knowledge of several things, which possibly they distinguish less by their Sight, than we imagine. For I have been credibly inform'd, that a Birch will nurse, play with, and be fond of young Foxes, as much

as,

as, and in place of her Puppies, if you can but get them once to suck her so long, that her Milk may go through them.

§. 8. When Children have, by repeated Sensations, got *Ideas* fixed in their Memories, they begin, by degrees, to learn the use of Signs: And when they have got the skill to apply the Organs of Speech to the framing of articulate Sounds, they begin to make use of *Words*, to signify their *Ideas* to others; which words they sometimes borrow from others, and sometimes make themselves, as one may observe among the new and unusual Names Children often give to things in their first use of Language.

§. 9. The use of Words then being to stand as outward Marks of our internal *Ideas*, and those *Ideas* being taken from particular things, if every particular *Idea* we take in, should have a distinct Name, Names must be endless. To prevent this, the Mind makes the particular *Ideas*, received from particular Objects, to become general; which is done by considering them as they are in the Mind such Appearances, separate from all other Existencies, and the circumstances of real Existence, as Time, Place, or any other concomitant *Ideas*. This is called *ABSTRACTION*, whereby *Ideas* taken from particular Beings, become general Representatives of all of the same kind; and their Names general Names, applicable to whatever exists conformable to such abstract *Ideas*. Such precise, naked Appearances in the Mind, without considering, how, whence, or with what others they came there, the Understanding lays up (with Names commonly annexed to them) as the Standards to rank real Existencies into sorts, as they agree with these Patterns, and to *denominate* them accordingly. Thus the same Colour being observed to day in Chalk or Snow, which the Mind yesterday received from Milk, it considers that Appearance alone, makes it a representative of all of that kind; and having given it the name *Whiteness*, it by that sound signifies the same quality wheresoever to be imagin'd or met with; and thus Universals, whether *Ideas* or Terms, are made.

§. 10. If it may be doubted, Whether *Beasts* compound and enlarge their *Ideas* that way, to any degree: This, I think, I may be positive in, That the power of *Abstracting*, is not at all in them; and that the having of general *Ideas*, is that which puts a perfect distinction betwixt Man and Brutes; and is an Excellency which the Faculties of Brutes do by no means attain to. For it is evident, we observe no foot-steps in them, of making use of general signs for universal *Ideas*; from which we have reason to imagine, that they have not the faculty of abstracting, or making general *Ideas*, since they have no use of Words, or any other general Signs.

§. 11. Nor can it be imputed to their want of fit Organs, to frame articulate Sounds, that they have no use, or knowledge of general Words; since many of them, we find, can fashion such Sounds, and pronounce Words distinctly enough, but never with any such application. And, on the other side, Men, who through some defect in the Organs, want words, yet fail not to express their universal *Ideas* by signs, which serve them instead of general words, a faculty which we see *Beasts* come short in. And therefore I think we may suppose, That 'tis in this, that the Species of *Brutes* are discriminated from Man; and 'tis that proper difference wherein they are wholly separated, and which at last widens to so vast a distance. For if they have any *Ideas* at all, and are not bare Machines (as some would have them) we cannot deny them to have some Reason. It seems as evident to me, that they do reason, as that they have sense;
but

but it is only in particular *Ideas*, just as they receiv'd them from their Senses. They are the best of them tied up within those narrow bounds, and *have not* (as I think) the faculty to enlarge them by any kind of *Abstraction*.

§. 12. How far *Idiots* are concerned in the want or weakness of any, or all of the foregoing Faculties, an exact observation of their several ways of faltering, would no doubt discover. For those who either perceive but dully, or retain the *Ideas* that come into their Minds, but ill, who cannot readily excite or compound them, will have little matter to think on. Those who cannot distinguish, compare, and abstract, would hardly be able to understand, and make use of Language, or judge, or reason to any tolerable degree; but only a little, and imperfectly, about things present, and very familiar to their Senses. And indeed, any of the fore-mentioned Faculties, if wanting, or out of order, produce suitable defects in Mens Understandings and Knowledge.

§. 13. In fine, The defect in *Naturals*, seems to proceed from want of quickness, activity, and motion, in the intellectual Faculties, whereby they are deprived of Reason: Whereas *mad Men*, on the other side, seem to suffer by the other Extream. For they do not appear to me to have lost the Faculty of Reasoning: but having joined together some *Ideas* very wrongly, they mistake them for Truths; and they err as Men do, that argue right from wrong Principles. For by the violence of their Imaginations, having taken their Fancies for Realities, they make right deduction from them. Thus you shall find a distracted Man phantizing himself a King, with a right inference, requires suitable Attendance, Respect, and Obedience: Others who have thought themselves made of glass, have used the caution necessary to preserve such brittle Bodies. Hence it comes to pass, that a Man, who is very sober, and of a right Understanding in all other things, may in one particular, be as frantick as any in *Bedlam*; if either by any sudden very strong impression, or long fixing his Fancy upon one sort of Thoughts, incoherent *Ideas* have been cemented together so powerfully, as to remain united. But there are degrees of Madness, as of Folly; the disorderly jumbling *Ideas* together, is in some more, and some less. In short, herein seems to lie the difference between Idiots and mad Men, That mad Men put wrong *Ideas* together, and so make wrong Propositions, but argue and reason right from them: But Idiots make very few or no Propositions, and reason scarce at all.

§. 14. These, I think, are the first Faculties and Operations of the Mind, which it makes use of in understanding; which though they are exercised about all its *Ideas* in general; yet the instances, I have hitherto given, have been chiefly in simple *Ideas*; and I have subjoined the explication of these Faculties of the Mind, to that of simple *Ideas*, before I come to what I have to say, concerning complex ones, for these following Reasons:

First, Because several of these Faculties being exercised at first principally about simple *Ideas*, we might, by following Nature in its ordinary method, trace and discover them in their rise, progress, and gradual improvements.

Secondly, Because observing the Faculties of our Mind, how they operate about simple *Ideas*, which are usually in most Mens Minds, much more clear, precise, and distinct, than complex ones, we may the better examine and learn how the Mind abstracts, denominates, compares, and exercises its other Operations, about those which are complex, wherein we are much more liable to mistake.

Thirdly,

Thirdly, Because these very Operations of the Mind about *Ideas*, receiv'd from *Sensation*, are themselves, when reflected on, another sett of *Ideas*, derived from that other source of our Knowledge, which I call *Reflection*; and therefore fit to be considered in this place, after the simple *Ideas* of *Sensation*. Of Compounding, Comparing, Abstracting, &c. I have but just spoken, having occasion to treat of them more at large in other places.

§. 15. And thus I have given a short, and, I think, true *History of the first beginnings of Humane Knowledge*; whence the Mind has its first Objects, and by what steps it makes its progress to the laying in, and storing up those *Ideas*, out of which is to be framed all the Knowledge it is capable of; wherein I must appeal to Experience and Observation, whether I am in the right: The best way to come to Truth, being to examine Things as really they are, and not to conclude they are as we fantasie of our selves, or have been taught to imagine by others.

§. 16. To deal truly, *this is the only way* that I can discover, whereby the *Ideas* of things are brought into the Understanding: If other Men have either innate *Ideas*, or infused Principles, they have reason to enjoy them; and if they are sure of it, it is impossible for others to deny them the privilege they have above their Neighbours. I can speak but of what I find in my self, and is agreeable to those Notions; which if we will examine the whole course of Men in their several Ages, Countries, and Educations, seems to depend on these foundations I have laid, and to correspond with this Method in all the parts and degrees thereof.

§. 17. I pretend not to teach, but to enquire; and therefore cannot but confess here again, That external and internal *Sensation*, are the only passages I can find of knowledge to the Understanding: These alone, as far as I can discover, are the Windows by which light is let into this dark Room. For, methinks, the Understanding is not much unlike a Closet wholly shut from light, with only some little openings left, to let in external visible resemblances, or *Ideas* of things without; which would they but stay there, and lie so orderly as to be found upon occasion, it would very much resemble the Understanding of a Man, in reference to all Objects of sights, and the *Ideas* of them.

These are my Guesses concerning the means whereby the Understanding comes to have, and retain simple *Ideas*, and the modes of them, with some other operations about them. I proceed now to examine some of these simple *Ideas*, and their Modes a little more particularly.

C H A P. XII.

Of Complex Ideas.

§. 1. **W**E have hitherto considered those *Ideas*, in the reception whereof, the Mind is only passive, which are those simple ones received from *Sensation* and *Reflection* before-mentioned, whereof the Mind cannot make any one to it self, nor have any *Idea* which does not wholly consist of them. But as these simple *Ideas* are observed to exist in several Combinations united together; so the Mind has a power to consider several of them united together, as one *Idea*; and that not only as they are united in external Objects, but as it self has joined them. *Ideas* thus made up of several simple ones put together, I call *Complex*; such as are *Beauty, Gratitude, a Man, an Army, the Universe*; which though complicated of various simple *Ideas*, or *complex Ideas*, made up of simple ones, yet are, when the Mind pleases, considered each by it self, as one entire thing, and signified by one name.

§. 2. In this faculty of repeating and joining together its *Ideas*, the Mind has great power in varying and multiplying the Objects of its Thoughts, infinitely beyond what *Sensation* or *Reflection* furnished it with: But all this still confined to those simple *Ideas*, which it received from those two Sources, and which are the ultimate Materials of all its Compositions. For these, they are all from things themselves; and *the Mind* can have no more, nor other simple *Ideas*, than as they are suggested to it. It can have no other *Ideas* of sensible Qualities, than what come from without by the Senses; nor any *Ideas* of other kind of Operations of a thinking Substance, than what it finds in it self: but when it has once got those simple *Ideas*, it is not confined barely to Observation, and what offers it self from without; it can, by its own power, put together those *Ideas* it has, and make new complex ones, which it never received so united.

§. 3. *Complex Ideas*, however compounded and decomposed, though their number be infinite, and the variety endless, wherewith they fill, and and entertain the Thoughts of Men; yet, I think, they may be all reduced under these three Heads:

1. *Modes.*
2. *Substances.*
3. *Relations.*

§. 4. First, *Modes* I call such complex *Ideas*, which however compounded, contain not in them the supposition of subsisting by themselves, but are considered as Dependences on, or Affections of Substances; such are the *Ideas* signified by the words *Triangle, Gratitude, Murther, &c.* and if in this I use the word *Mode*, in somewhat a different sense from its ordinary signification, I beg pardon; it being unavoidable in Discourses, differing from the ordinary received Notions, either to make new Words, or to use old Words in somewhat a new signification; which in our present case, is perhaps the more tolerable of the two.

§. 5. Of these *Modes*, there are two sorts, which deserve distinct consideration. First, There are some which are only variations, or different combinations of the same simple *Idea*, without the mixture of any other, as a dozen, or score; which are nothing but the *Ideas* of so many distinct Unites added together, and these I call *simple Modes*, as being contained within the bounds of one simple *Idea*. Secondly, There are others compounded of simple *Ideas* of several kinds, put together to make one complex one; v. g. *Beauty*, consisting of a certain composition of Colour and Figure, causing delight in the Beholder; *Theft*, which being the concealed change of the possession of any thing, without the consent of the Proprietor, contains, as is visible, a combination of several *Ideas* of several kinds; and these I call *mixed Modes*.

§. 6. Secondly, The *Ideas* of *Substances* are such combinations of simple *Ideas*, as are taken to represent distinct particular things subsisting by themselves; in which the supposed, or confused *Idea* of Substance, such as it is, is always the first and chief. Thus if to Substance be joined the simple *Idea* of a certain dull whitish colour, with certain degrees of Weight, Hardness, Ductility, and Fusibility, we have the *Idea* of *Lead*; and a combination of the *Ideas* of a certain sort of Figure, with the powers of Motion, Thought, and Reasoning, joined to Substance, make the ordinary *Idea* of a *Man*. Now of Substances also, there are two sorts of *Ideas*; one of single Substances, as they exist separately, as of a *Man*, or a *Sheep*; the other of several of those put together, as an *Army* of Men, or *Flock* of Sheep; which *collective Ideas* of several *Substances* thus put together, are as much each of them one single *Idea*, as that of a *Man*, or an *Unite*.

§. 7. Thirdly, The last sort of complex *Ideas*, is that we call *Relation*, which consists in the consideration and comparing one *Idea* with another, of these several kinds, we shall treat in their order.

§. 8. If we will trace the progress of our Minds, and with attention observe how it repeats, adds together, and unites its simple *Ideas* received from Sensation or Reflection, it will lead us farther than at first, perhaps, we should have imagined. And, I believe, we shall find, if we warily observe the Originals of our Notions, that even the most *abstruse Ideas*, how remote soever they may seem from Sense, or any operation of our own Minds, are yet only such as the Understanding frames to it self, by repeating and joining together *Ideas*, that it had either from Objects of Sense, or its own operations about them: So that those even large and *abstract Ideas* are derived from *Sensation, or Reflection*, being no other than what the Mind by the ordinary use of its own Faculties, employ'd about *Ideas* received from Objects of Sense, or the Operations it observes in it self about them, may, and does attain unto. This I shall endeavour to shew in the *Ideas* we have of *Space, Time, and Infinity*, and some few other, that seem the most remote from those Originals.

C H A P. XIII.

Of simple Modes ; and first, of the simple Modes of Space.

§. 1. **T**Hough in the foregoing part, I have often mentioned simple *Ideas*, which are truly the Materials of all our Knowledge ; yet having treated of them there, rather in the way that they come into the Mind, than as distinguished from others more compounded, it will not be, perhaps, amiss to take a view of some of them again under this Consideration, and examine those different *Modifications of the same Idea* ; which the Mind either finds in things existing, or is able to make within it self, without the help of any extrinsical Object, or any foreign Suggestion.

Those *Modifications of any one simple Idea* (which as has been said, I call *simple Modes*) are as perfectly different and distinct *Ideas* in the Mind, as those of the greatest distance or contrariety. For the *Idea of Two*, is as distinct from *Three*, as *Blueness* from *Heat*, or either of them from any Number ; and yet they are made up only of that simple *Idea* of an Unite repeated ; and these Repetitions joined together, make those distinct *simple Modes*, of a *Dozen*, a *Gross*, a *Million*.

§. 2. I shall begin with the *simple Idea of Space*. I have shewed above, c. 4. that we get the *Idea* of Space, both by our Sight, and Touch ; which, I think, is so evident, that it would be as needless, to go to prove, that Men perceive by their Sight, a distance between Bodies of different Colours, or between the parts of the same Body ; as that they see Colours themselves : Nor is it less obvious, that they can do so in the Dark by Feeling and Touch.

§. 3. This Space considered barely in length between any two Beings, without considering any thing else between them, is called *distance* : If considered in Length, Breadth, and Thickness, I think, it may be called *Capacity* : When considered between the extremities of Matter, which fills the Capacity of Space with something solid, tangible, and movable, it is properly called *Extension*. And so *Extension* is an *Idea* belonging to Body only ; but *Space* may, as is evident, be considered without it. At least, I think it most intelligible, and the best way to avoid Confusion, if we use the Word *Extension* for an Affection of Matter, or the distance of the Extremities of particular solid Bodies ; and *Space* in the more general Signification for distance, with or without solid Matter possessing it.

§. 4. Each different distance is a different Modification of Space, and each *Idea of any different distance, or Space, is a simple Mode of this Idea*. Men having by accustoming themselves to stated lengths of Space, which they use for measuring of other distances, as a *Foot*, a *Yard*, or a *Fathom*, a *League*, or *Diameter of the Earth*, made those *Ideas* familiar to their Thoughts, can in their Minds repeat them as often as they will, without mixing or joining to them the *Idea* of Body, or any thing else ; and frame to themselves the *Ideas* of long, square, or cubick, Feet, Yards, or Fathoms, here amongst the Bodies of the Universe, or else beyond the utmost Bounds of all Bodies ; and by adding these still one to another, enlarge their *Idea* of Space as much as they please. This Power of repeating, or doubling any *Idea* we have of any distance, and adding it to

the former as often as we will, without being ever able to come to any stop or flint, let us enlarge it as much as we will, is that which gives us the *Idea* of *Immensify*.

§. 5. There is another Modification of this *Idea* of Space, which is nothing but the Relation of the Parts of the Termination of Capacity, or Extension amongst themselves. This the Touch discovers in sensible Bodies, whose Extremities come within our reach; and the Eye takes both from Bodies and Colours, whose Boundaries are within its view: Where observing how the Extremities terminate, either in streight Lines, which meet at discernible Angles; or in crooked Lines, wherein no Angles can be perceived, by considering these as they relate to one another, in all Parts of the Extremities of any Body or Space, it has that *Idea* we call *Figure*, which affords to the Mind infinite Variety. For besides the vast Number of different Figures, that do really exist in the coherent masses of Matter, the Stock, that the Mind has in its Power, by varying the *Idea* of Space; and thereby making still new Compositions, by repeating its own *Ideas*, and joining them as it pleases, is perfectly inexhaustible: And so it can multiply Figures *in infinitum*.

§. 6. For the Mind, having a Power to repeat the *Idea* of any length directly stretched out, and join it to another in the same Direction, which is to double the length of that streight Line; or else join it to another with what Inclination it thinks fit, and so make what sort of Angle it pleases: And being able also to shorten any Line it imagines, by taking from it $\frac{1}{2}$ or $\frac{1}{4}$, or what part it pleases, without being able to come to an end of any such Divisions, it can make an Angle of any bigness: So also the Lines that are its sides of what length it pleases, which joining again to other Lines of different lengths, and at different Angles, till it has wholly inclosed any Space, it is evident that it can multiply *Figures* both in their Shape, and Capacity, *in infinitum*, all which are but so many different *simple Modes of Space*.

The same that it can do with streight Lines, it can do also with crooked, or crooked and streight together; and the same it can do in Lines, it can also in Superficies, by which we may be led into farther Thoughts of the endless Variety of *Figures*, that the Mind has a Power to make, and thereby to multiply the *simple Modes of Space*.

§. 7. Another *Idea* coming under this Head, and belonging to this Tribe, is that we call *Place*. As in simple Space, we consider the relation of Distance between any two Bodies, or Points; so in our *Idea* of *Place*, we consider the relation of Distance betwixt any thing, and any two or more Points, which are considered, as keeping the same distance one with another, and so considered as at rest; for when we find any thing at the same distance now, which it was Yesterday from any two or more Points, which have not since changed their distance one with another, and with which we then compared it, we say it hath kept the same *Place*: But if it hath sensibly altered its distance with either of those Points, we say it hath changed its *Place*: Though vulgarly speaking in the common Notion of *Place*, we do not always exactly observe the distance from precise Points; but larger Portions of sensible Objects, to which we consider the thing placed to bear Relation, and its distance, from which we have some Reason to observe.

§. 8. Thus a Company of Chess-men, standing on the same squares of the Chess-board, where we left them, we say they are all in the same *Place*, or unmoved; though, perhaps, the Chess-board hath been in the mean time carried out of one Room into another, because we compared them only

ly to the Parts of the Chets-board, which keep the same distance one with another. The Chets-board, we also say, is in the *same Place* it was, if it remain in the same part of the Cabin, though, perhaps, the Ship it is in, sails all the while: and the Ship is said to be in the *same Place*, supposing it kept the same distance with the Parts of the neighbouring Land; though, perhaps, the Earth hath turned round; and so both Chets-men, and Board, and Ship, have every one *changed Place* in respect of remoter Bodies, which have kept the same distance one with another. But yet the distance from certain Parts of the Board, being that which determines the place of the Chets-men; and the distance from the fixed parts of the Cabin (with which we made the Comparison) being that which determined the Place of the Chets-board; and the fixed parts of the Earth, that by which we determined the Place of the Ship, these things may be said properly to be in the *same Place*, in those respects: Though their distance from some other things, which in this matter we did not consider, being varied, they have undoubtedly *changed Place* in that respect; and we our selves shall think so, when we have occasion to compare them with those other.

§. 9. But this Modification of Distance, we call *Place*, being made by Men, for their common use, that by it they might be able to design the particular Position of Things, where they had occasion for such Designation, Men consider and determine of this *Place*, by reference to those adjacent things, which best served to their present Purpose, without considering other things, which to another Purpose would better *determine the Place* of the same thing. Thus in the Chets-board, the use of the *Designation of the Place* of each Chets-men, being determined only within that chequer'd piece of Wood, 'twould cross that Purpose, to measure it by any thing else: But when these very Chets-men are put up in a Bag, if any one should ask, where the black King is, it would be proper to *determine the Place* by the parts of the Room it was in, and not by the Chets-board; there being another use of *designing the Place* it is now in, than when in Play it was on the Chets-board, and so must be determined by other Bodies. So if any one should ask, in what Place are the Verses, which report the Story of *Nisus* and *Eurialus*, 'twould be very improper to determine this Place, by saying, they were in such a part of the Earth, or in *Bodley's Library*: But the right Designation of the place, would be by the parts of *Virgil's Works*; and the proper Answer would be, That these Verses were about the middle of the Ninth Book of his *Æneides*; And that they have been always constantly in the same Place ever since *Virgil* was printed: Which is true, though the Book it self hath moved a Thousand times, the use of the *Idea* of Place here, being to know only, in what part of the Book that Story is; that so upon occasion, we may know where to find it, and have recourse to it for our use.

§. 10. That our *Idea* of Place, is nothing else, but such a relative Position of any thing, as I have before mentioned, I think, is plain, and will be easily admitted, when we consider, that we can have no *Idea* of the place of the Universe, though we can of all the parts of it; because beyond that, we have not the *Idea* of any fixed, distinct, particular Beings, in reference to which, we can imagine it to have any relation of distance; but all beyond it is one uniform Space or Expansion, wherein the Mind finds no variety, no marks. For to say that the World is somewhere, means no more, but that it does exist; this though a Phrase, borrowed from Place, signifying only its Existence, not Location; and when one can find out, and frame in his Mind clearly and distinctly the Place of the Universe, he will be able to tell us, whether it moves or stands still in the undistinguishable

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Inane of infinite Space; tho' it be true, that the Word Place, has sometimes a more confus'd Sense, and stands for that Space, which any Body takes up; and so the Universe is in a Place

§. 11. The *Idea* therefore of *Place*, we have by the same means, that we get the *Idea* of Space, (whereof this is but a particular limited Consideration, viz. by our Sight and Touch; by either of which we receive into our Minds the *Ideas* of Extension or Distance.

§. 12. There are some that would persuade us, that *Body and Extension are the same thing*; who either change the Signification of Words, which I would not suspect them of, they having so severely condemn'd the Philosophy of others, because it hath been too much placed in the uncertain meaning, or deceitful obscurity of doubtful, or insignificant Terms. If therefore they mean by *Body and Extension the same*, that other People do, viz. by *Body* something that is solid, and extended, whose parts are separable and movable different ways; and by *Extension*, only the Space that lies between the Extremities of those solid coherent Parts, and which is possess'd by them, they confound very different *Ideas* one with another. For I appeal to every Man's own Thoughts, whether the *Idea* of Space be not as distinct from that of Solidity, as it is from the *Idea* of Scarlet-Colour? 'Tis true, Solidity cannot exist without Extension, neither can Scarlet Colour exist without Extension; but this hinders not, but that they are distinct *Ideas*. Many *Ideas* require others, as necessary to their Existence or Conception, which yet are very distinct *Ideas*. Motion can neither be, nor be conceived without Space; and yet Motion is not Space, nor Space Motion; Space can exist without it, and they are very distinct *Ideas*; and so, I think, are those of Space and Solidity. Solidity is so inseparable an *Idea* from Body, that upon that depends its filling of Space, its Contact, Impulse, and Communication of Motion upon Impulse. And if it be a Reason to prove, that Spirit is different from Body, because Thinking includes not the *Idea* of Extension in it; the same Reason will be as valid, I suppose, to prove, that *Space is not Body*, because it includes not the *Idea* of Solidity in it; *Space and Solidity* being as distinct *Ideas*, as Thinking and Extension, and as wholly separable in the Mind one from another: *Body* then and *Extension*, 'tis evident, are two distinct *Ideas*; for First, *Extension* includes no Solidity, nor resistance to the Motion of *Body*, as *Body* does. Secondly, The Parts of pure Space are inseparable one from the other; so that the Continuity cannot be separated, neither really, nor mentally. For I demand of any one, to remove any part of it from another, with which it is continued, even so much as in Thought. To divide and separate actually is, as I think, by removing the parts one from another, to make two Superficies, where before there was a Continuity: And to divide mentally, is to make in the Mind two Superficies, where before there was a Continuity, and consider them as removed one from the other; which can only be done in things considered by the Mind, as capable of being separated; and by separation, of acquiring new distinct Superficies, which they then have not, but are capable of: But neither of these ways of Separation, whether real or mental, is, as I think, compatible to pure *Space*.

§. 13. 'Tis true, a Man may consider so much of such a *Space*, as is answerable or commensurate to a Foot, without considering the rest; which is indeed a partial Consideration, but not so much as mental Separation, or Division; since a Man can no more mentally divide, without considering two Superficies, separate one from the other, than he can actually divide, without making two Superficies disjoin'd one from the other:

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But a partial consideration is not separating. A Man may consider Light in the Sun, without its Heat ; or Mobility in Body without its Extension, without thinking of their separation. One is only a partial Consideration, terminating in one alone ; and the other is a Consideration of both, as existing separately.

§. 14. *Thirdly*, The parts of pure *Space*, are immovable, which follows from their inseparability ; *Motion* being nothing but change of distance between any two things : But this cannot be between Parts that are inseparable ; which therefore must needs be at perpetual rest one amongst another.

Thus the clear and distinct *Idea* of simple *Space* distinguishes it plainly, and sufficiently from *Body* ; since its Parts are inseparable, immovable, and without resistance to the Motion of Body.

§. 15. If any one ask me, *What this Space, I speak of, is ?* I will tell him, when he tells me what his *Extension* is. For to say, as is usually done, That *Extension* is to have *partes extra partes*, is to say only, That *Extension* is *Extension* : For what am I the better informed in the nature of *Extension*, when I am told, That *Extension* is to have parts that are extended, exterior to parts that are extended, i. e. *Extension* consists of extended Parts ? As if one asking, What a Fibre was ; I should answer him, That it was a thing made up of several Fibres : Would he hereby be enabled to understand what a Fibre was, better than he did before ? Or rather, would he not have reason to think, that my design was to make sport with him, rather than seriously to instruct him ?

§. 16. Those who contend that *Space* and *Body* are the same, bring this *Dilemma* : Either this *Space* is something or nothing ; if nothing be between two Bodies, they must necessarily touch ; if it be allowed to be something, they ask, whether it be Body or Spirit ? To which I answer by another Question, Who told them, that there was, or could be nothing but solid Beings which could not think, and thinking Beings that were not extended ? Which is all they mean by the terms *Body* and *Spirit*.

§. 17. If it be demanded (as usually it is) whether this *Space* void of *Body*, be *Substance* or *Accident*, I shall readily answer, I know not ; nor shall be ashamed to own my Ignorance, till they that ask, shew me a clear distinct *Idea* of *Substance*.

§. 18. I endeavour, as much as I can, to deliver my self from those Fallacies, which we are apt to put upon our selves, by taking Words for Things. It helps not our Ignorance, to feign a Knowledge, where we have none, by making a noise with Sounds, without clear and distinct Significations. Names made at pleasure, neither alter the nature of things, nor make us understand them, but as they are signs of, and stand for clear and distinct *Ideas*. And I desire those who lay so much stress on the sound of these two Syllables, *Substance*, to consider, whether applying it, as they do, to the infinite incomprehensible GOD, to finite Spirits, and to Body, it be in the same sense ; and whether it stand for the same *Idea*, when each of those three so different Beings are called *Substances* ? If so, whether it will not thence follow, That God, Spirits, and Body, agreeing in the same common nature of *Substance*, differ not otherwise than in a bare different modification of that *Substance* ; as a Tree and a Pebble, being in the same sense bodied, and agreeing in the common nature of Body, differ only in a bare modification of that common matter ; which will be a very harsh Doctrine. If they say, That they apply it to God, finite Spirits, and Matter, in three different significations, and that it stands for one *Idea*, when GOD is said to be a *Substance* ; for another, when

when the Soul is called *Substance*; and for a third, when a Body is called so. If the name *Substance*, stands for three several distinct *Ideas*, they would do well to make known those distinct *Ideas*, or at least to give three distinct names to them, to prevent in so important a Notion, the Confusion and Errors, that will naturally follow from the promiscuous use of so doubtful a term; which is so far from being suspected to have three distinct, that it has scarce one clear distinct signification: And if they can thus make three distinct *Ideas* of *Substance*, what hinders why another may not make a fourth?

§. 19. They who first ran into the Notion of *Accidents*, as a sort of real Beings, that needed something to inhere in, were forced to find out the word *Substance*, to support them. Had the poor *Indian* Philosopher (who imagined that the Earth also wanted something to bear it up) but thought of this word *Substance*, he needed not to have been at the trouble to find an Elephant to support it, and a Tortoise to support his Elephant: The word *Substance* would have done it effectually. And he that enquired, might have taken it for as good an Answer from an *Indian* Philosopher, That *Substance*, without knowing what it is, is that which supports the Earth, as we take it for a sufficient Answer, and good Doctrine, from our *European* Philosophers, That *Substance* without knowing what it is, is that which supports *Accidents*. So that of *Substance*, we have no *Idea* of what it is, but only a confused obscure one of what it does.

§. 20. Whatever a learned Man may do here, an intelligent *American*, who enquired into the Nature of Things, would scarce take it for a satisfactory Account, if desiring to learn our Architecture, he should be told, That a Pillar was a thing supported by a *Basis*, and a *Basis* something that supported a Pillar. Would he not think himself mocked, instead of taught, with such an account as this? And a Stranger to them would be very liberally instructed in the nature of Books, and the things they contained, if he should be told, that all learned Books consisted of Paper and Letters, and that Letters were things inhering in Paper, and Paper a thing that held forth Letters; a notable way of having clear *Ideas* of Letters and Paper. But were the Latin words *Inherentia* and *Substantia*, put into the plain English ones that answer them, and were called *Sticking-on*, and *Under-propping*, they would better discover to us the very great clearness there is in the Doctrine of *Substance* and *Accidents*, and shew of what use they are in deciding of Questions in Philosophy.

§. 21. But to return to our *Ideas* of Space. If *Body* be not supposed infinite, which, I think, no one will affirm, I would ask, Whether if God placed a Man at the extremity of corporeal Beings, he could not stretch his Hand beyond his Body? If he could, then he would put his Arm, where there was before Space without *Body*; and if there he spread his Fingers, there would still be Space between them without *Body*: If he could not stretch out his Hand, it must be because of some external hindrance; (for we suppose him alive, with such a power of moving the parts of his Body, that he hath now, which is not in it self impossible, if God so pleased to have it;) or at least it is not impossible for God so to move him: And then I ask, Whether that which hinders his Hand from moving outwards, be Substance or Accident, Something or Nothing? And when they have resolved that, they will be able to resolve themselves, what that is, which is or may be between two Bodies at a distance, that is not Body, has no Solidity. In the mean time, the Argument is at least as good, That where nothing hinders, (as beyond the utmost bounds of all Bodies,) a *Body* put into motion may move on, as where there is nothing

thing between, there two Bodies must necessarily touch. For pure *Space* between, is sufficient to take away the necessity of mutual Contact; but bare *Space* in the way, is not sufficient to stop Motion. The truth is, these Men must either own, that they think Body infinite, though they are loth to speak it out, or else affirm, that *Space* is not *Body*. For I would fain meet with that thinking Man, that can, in his Thoughts, set any bounds to *Space*, more than he can to Duration; or by thinking, hope to arrive at the end of either: And therefore if his *Idea* of Eternity be infinite, so is his *Idea* of Immensity; they are both finite or infinite alike.

§. 21. Farther, those who assert the impossibility of *Space* existing without *Matter*, must not only make Body infinite, but must also deny a power in God to annihilate any part of *Matter*. No one, I suppose, will deny, that God can put an end to all motion that is in *Matter*, and fix all the Bodies of the Universe in a perfect quiet and rest, and continue them so as long as he pleases. Whoever then will allow, that God can, during such a general rest, annihilate either this Book, or the Body of him that reads it, must necessarily admit the possibility of a *Vacuum*. For it is evident, that the *Space* that was filled by the parts of the annihilated Body, will still remain, and be a *Space* without Body. For the circumambient Bodies being in perfect rest, are a Wall of Adamant, and in that state make it a perfect impossibility for any other Body to get into that *Space*. And indeed the necessary motion of one Particle of *Matter*, into the place from whence another Particle of *Matter* is removed, is but a consequence from the supposition of Plenitude; which will therefore need some better proof, than a supposed matter of fact, which Experiment can never make out; our own clear and distinct *Ideas* plainly satisfying us, that there is no necessary connexion between *Space* and *Solidity*, since we can conceive the one without the other. And those who dispute for or against a *Vacuum*, do thereby confess, they have distinct *Ideas* of *Vacuum* and *Plenum*, i. e. that they have an *Idea* of Extension void of Solidity, though they deny its existence; or else they dispute about nothing at all. For they who so much alter the signification of Words, as to call *Extension* Body, and consequently make the whole Essence of Body, to be nothing but pure Extension without Solidity, must talk absurdly, whenever they speak of *Vacuum*, since it is impossible for Extension to be without Extension. For *Vacuum*, whether we affirm or deny its existence, signifies *Space* without Body, whose very existence no one can deny to be possible, who will not make *Matter* infinite, and take from God a power to annihilate any Particle of it.

§. 22. But not to go so far as beyond the utmost bounds of Body in the Universe, nor appeal to God's Omnipotency to find a *Vacuum*, the motion of Bodies, that are in our view and neighbourhood, seem to me plain to evince it. For I desire any one so to divide a solid Body of any dimension he pleases, as to make it possible for the solid Parts to move up and down freely every way, within the bounds of that Superficies, if there be not left in it a void space, as big as the least part into which he has divided the said solid Body. And if where the least Particle of the Body divided, is as big as a Mustard-feed, a void *Space* equal to the bulk of a Mustard-feed, be requisite to make room for the free motion of the Parts of the divided Body, within the bounds of its Superficies, where the Particles of *Matter* are 100,000,000 less than a Mustard-feed, there must also be a space void of solid *Matter*, as big as 100,000,000 part of a Mustard-feed; for if it hold in one, it will hold in the other, and so on in infinitum. And let this void *Space* be as little as it will, it destroys the Hypothesis of Plenitude. For if there can be a

Space void of Body, equal to the smallest separate Particle of Matter now existing in Nature, 'tis still Space without Body; and makes as great a difference between Space and Body, as if it were Μέγα χεῖμα, a distance as wide as any in Nature. And therefore if we suppose not the void Space necessary to Motion, equal to the least parcel of the divided solid Matter, but to $\frac{1}{10}$ or $\frac{1}{1000}$ of it, the same consequence will always follow of Space without Matter.

§. 23. But the Question being here, whether the *Idea of Space* or *Extension*, be the same with the *Idea of Body*, it is not necessary to prove the real existence of a *Vacuum*, but the *Idea* of it; which 'tis plain Men have, when they enquire and dispute, whether there be a *Vacuum* or no? For if they had not the *Idea* of Space without Body, they could not make a question about its existence: And if their *Idea* of Body did not include in it something more than the bare *Idea* of Space, they could have no doubt about the plenitude of the World; and 'twould be as absurd to demand, whether there were Space without Body, as whether there were Space without Space, or Body without Body, since these were but different Names of the same *Idea*.

§. 24. 'Tis true, the *Idea of Extension* joins it self so inseparably with all visible, and most tangible Qualities, that it suffers us to see no one, or feel very few external Objects, without taking in impressions of Extension too. This readiness of Extension to make it self be taken notice of so constantly with other *Ideas*, has been the occasion, I guess, that some have made the whole essence of *Body*, to consist in Extension; which is not much to be wondred at, since some have had their Minds, by their Eyes and Touch, (the busiest of all our Senses,) so filled with the *Idea* of Extension, and as it were wholly possessed with it, that they allowed no existence to any thing, that had not Extension. I shall not now argue with those Men, who take the measure and possibility of all Being, only from their narrow and gross Imaginations: but having here to do only with those, who conclude the essence of Body to be *Extension*, because, they say, they cannot imagine any sensible Quality of any Body without Extension, I shall desire them to consider, That had they reflected on their *Ideas* of Tastes and Smells, as much as on those of Sight and Touch; nay, had they examined their *Ideas* of Hunger and Thirst, and several other Pains, they would have found, that they included in them no *Idea* of Extension at all, which is but an affection of Body, as well as the rest discoverable by our Senses, which are scarce acute enough to look into the pure Essence of Things.

§. 25. If those *Ideas*, which are constantly joined to all others, must therefore be concluded to be the Essence of those Things, which have constantly those *Ideas* joined to them, and are inseparable from them; then Unity is without doubt the essence of every thing. For there is not any Object of Sensation or Reflection, which does not carry with it the *Idea* of one: But the weakness of this kind of Argument, we have already shewn sufficiently.

§. 26. To conclude, whatever Men shall think concerning the existence of a *Vacuum*, this is plain to me, That we have as clear an *Idea* of Space distinct from Solidity, as we have of Solidity distinct from Motion, or Motion from Space. We have not any two more distinct *Ideas*, and we can as easily conceive Space without Solidity, as we can conceive Body without Motion, though it be never so certain, that neither Body nor Motion can exist without Space. But whether any one will take Space to be only a relation resulting from the Existence of other Beings at a distance;

stance; or whether they will think the Words of the most knowing King Solomon, *The Heaven, and the Heaven of Heavens, cannot contain Thee*; or those more emphatical ones of the inspired Philosopher St. Paul, *In Him we live, move, and have our Being*, are to be understood in a literal sense, I leave every one to consider; only our *Idea* of *Space* is, I think, such as I have mentioned, and distinct from that of *Body*. For whether we consider in matter it self, the distance of its coherent solid parts, and call it, in respect of those solid parts, *Extension*; or whether considering it, as lying between the extremities of any *Body* in its several dimensions, we call it *Length, Breadth, and Thickness*; or else considering it as lying between any two *Bodies*, or positive Beings, without any consideration, whether there be any Matter or no between, we call it *Distance*. However named or considered, it is always the same uniform simple *Idea* of *Space*, taken from Objects, about which our Senses have been conversant, whereof having settled *Ideas* in our Minds, we can revive, repeat, and add them one to another as often as we will, and consider the *Space* or *Distance* so imagined, either as filled with solid parts, so that another *Body* cannot come there, without displacing and thrusting out the *Body* that was there before; or else as void of Solidity, so that a *Body* of equal dimensions to that empty or pure *Space*, may be placed in it without the removing or expulsion of any thing that was there.

§. 27. The knowing precisely what our Words stand for, would, I imagine, in this, as well as a great many other cases, quickly end the dispute. For I am apt to think, that Men, when they come to examine them, find their simple *Ideas* all generally to agree, though in discourse with one another, they perhaps confound one another with different Names. I imagine, that Men who abstract their Thoughts, and do well examine the *Ideas* of their own Minds; *cannot much differ in thinking*; however, they may perplex themselves with words, according to the way of speaking of the several Schools, or Sects they have been bred up in: Though amongst unthinking Men, who examine not scrupulously and carefully their own *Ideas*, and strip them not from the marks Men use for them, but confound them with words, there must be endless dispute, wrangling, and jargon; especially if they be learned bookish Men, devoted to some Sect, and accustomed to the Language of it; and have learned to talk after others. But if it should happen, that any two thinking Men should really have different *Ideas*, different Notions, I do not see how they could discourse, or argue one with another. Here I must not be mistaken, to think that every floating Imagination in Mens Brains, is presently of that sort of *Ideas* I speak of. 'Tis not easie for the Mind to put off those confused Notions and Prejudices it has imbibed from Custom, Inadvertency, and common Conversation: it requires pains and assiduity to examine its *Ideas*, till it resolves them into those clear and distinct simple ones, out of which they are compounded; and to see which, amongst its simple ones, have or have not a necessary connexion and dependence one upon another: Till a Man doth this in the primary and original Notions of Things, he builds upon floating and uncertain Principles, and will often find himself at a loss.

C H A P. XIV.

Of Duration, and its simple Modes.

§. 1. **T**Here is another sort of Distance, or Length, the *Idea* whereof we get not from the permanent parts of Space, but from the fleeting and perpetually perishing parts of Succession. This we call *Duration*, the simple Modes whereof are any different lengths of it, whereof we have distinct *Ideas*, as *Hours*, *Days*, *Tears*, &c. *Time*, and *Eternity*.

§. 2. The Answer of a great Man, to one who asked what Time was (*Si non rogas intelligo*, which amounts to this; the more I set my self to think of it, the less I understood it;) might perhaps persuade one, That *Time*, which reveals all other things, is it self not to be discovered. *Duration*, *Time*, and *Eternity*, are, not without reason, thought to have something very obstruse in their nature. But however remote this may seem from our Comprehension, yet if we trace them right to their Originals, I doubt not but one of those Sources of all our Knowledge, *viz.* *Sensation* and *Reflection*, will be able to furnish us with those *Ideas*, as clear and distinct as many others, which are thought much less obscure; and we shall find, that the *Idea* of *Eternity* it self, is derived from the same common Original with the rest of our *Ideas*.

§. 3. To understand *Time* and *Eternity* aright, we ought with attention to consider what *Idea* it is we have of *Duration*, and how we came by it. 'Tis evident to any one who will but observe what passes in his own Mind, that there is a train of *Ideas*, which constantly succeed one another in his Understanding, as long as he is awake. *Reflection* on these appearances of several *Ideas* one after another in our Minds, is that which furnishes us with *Idea* of *Succession*: And the distance between any parts of that Succession, or between the appearance of any two *Ideas* in our Minds, is that we call *Duration*. For whilst we are thinking, or whilst we receive successively several *Ideas* in our Minds, we know that we do exist; and so we call the Existence, or the Continuation of the Existence of our selves, or any thing else, Commensurate to the succession of any *Ideas* in our Minds, the *Duration* of our selves, or any such other thing co-existing with our Thinking.

§. 4. That we have our notion of *Succession* and *Duration* from this Original, *viz.* from *Reflection* on the train of *Ideas*, which we find to appear one after another in our own Minds, seems plain to me, in that we have no perception of *Duration*, but by considering the train of *Ideas*, that take their turns in our Understandings. When that succession of *Ideas* ceases, our perception of *Duration* ceases with it; which every one clearly experiments in himself, whilst he sleeps soundly, whether an hour, or a day; a month, or a year; of which *Duration* of things, whilst he sleeps, or thinks not, he has no perception at all, but it is quite lost to him; and the moment wherein he leaves off to think, till the moment he begins to think again, seem to him to have no distance. And so I doubt not but it would be to a waking Man, if it were possible for him to keep only one *Idea* in his Mind, without variation, and the succession of others: And we see, that one who fixes his Thoughts very intently on one thing, so as to take but little notice of the succession of *Ideas* that pass in

in his Mind, whilst he is taken up with that earnest Contemplation, lets slip out of his Account a good part of that Duration, and thinks that time shorter than it is. But if sleep commonly unite the distant parts of Duration, it is, because during that time we have no Succession of *Ideas* in our Minds. For if a Man, during his Sleep, dream, and variety of *Ideas* make themselves perceptible in his Mind one after another, he hath then, during such dreaming, a Sense of *Duration*, and of the length of it. By which it is to me very clear, that Men derive their *Ideas* of Duration, from their *Reflection on the train of the Ideas*, they observe to succeed one another in their own Understandings, without which Observation they can have no Notion of *Duration*, whatever may happen in the World.

§. 5. Indeed a Man, having from reflecting on the Succession and Number of his own Thoughts, got the Notion, or *Idea* of *Duration*, he can apply that Notion to things, which exist whilst he does not think; as he, that has got the *Idea* of Extension from Bodies by his Sight or Touch, can apply it to distances, where no Body is seen or felt. And therefore, though a Man have no Perception of the length of Duration, which past whilst he slept, or thought not: Yet having observed the Revolution of Days and Nights, and found the length of their Duration to be in Appearance regular and constant, he can, upon the supposition, that that Revolution has proceeded after the same manner, whilst he was asleep or thought not, as it used to do at other times, he can, I say, imagine and make allowance for the length of *Duration*, whilst he slept. But if Adam and Eve (when they were alone in the World) instead of their ordinary Nights Sleep, had passed that, and the following 24 hours in one continued Sleep, the Duration of that 24 hours had been irrecoverably lost to them, and been for ever left out of their Account of time.

§. 6. Thus by reflecting on the appearing of various *Ideas*, one after another in our Understandings, we get the Notion of Succession; which if any one should think, we did rather get from our Observation of Motion by our Senses, he will, perhaps, be of my Mind, when he considers, that even Motion produces in his Mind an *Idea* of Succession, no otherwise than as it produces there a continued train of distinguishable *Ideas*. For a Man looking upon a Body really moving, perceives yet no Motion at all, unless that Motion produces a constant train of successive *Ideas*. v.g. a Man becalmed at Sea, out of sight of Land, in a fair Day, may look on the Sun, or Sea, or Ship, a whole hour together, and perceive no Motion at all in either; though it be certain, that two, and perhaps all of them, have moved, during that time, a great way: But as soon as he perceives either of them to have changed distance with some other Body, as soon as this Motion produces any new *Idea* in him, then he perceives, that there has been Motion. But where-ever a Man is, with all things at rest about him, without perceiving any Motion at all; if during this hour of quiet he has been thinking, he will perceive the various *Ideas* of his own Thoughts in his own Mind, appearing one after another, and thereby observe, and find Succession, where he could observe no Motion.

§. 7. And this, I think, is the Reason, why *Motions very slow*, though they are constant, are not perceived by us; because in their remove from one sensible part towards another, their change of distance is so slow, that it causes no new *Ideas* in us, but a good while one after another: And so not causing a constant train of new *Ideas*, to follow one another immediately in our Minds, we have no Perception of Motion; which consisting in a constant Succession, we cannot perceive that Succession, without a constant Succession of varying *Ideas* arising from it.

§. 8. On

§. 8. On the contrary, *things that move* so swift, as not to affect the Senses distinctly with several distinguishable distances of their Motion, and so cause not any train of *Ideas* in the Mind, *are not* also perceived. For any thing, that moves round about in a Circle, in less time than our *Ideas* are want to succeed one another in our Minds, is not perceived to move; but seems to be a perfect entire Circle of that Matter, or Colour, and not a part of a Circle in Motion.

§. 9. Hence I leave it to others to judge, whether it be not probable that our *Ideas* do, whilst we are awake, succeed one another in our Minds at certain distances, not much unlike the Images in the inside of a Lanthorn, turned round by the Heat of a Candle. This Appearance of theirs in train, though, perhaps, it may be sometimes faster, and sometimes slower; yet, I guess, varies not very much in a waking Man: There seem to be *certain Bounds to the quickness and slowness of the Succession* of those *Ideas* one to another in our Minds, beyond which they can neither delay nor hasten.

§. 10. The Reason I have for this odd conjecture is, from observing that in the Impressions made upon any of our Senses, we can but to a certain degree perceive any Succession; which if exceeding quick, the Sense of Succession is lost, even in Cases where it is evident, that there is a real Succession. Let a Cannon-Bullet pass through a Room, and in its way take with it any Limb, or fleshy Parts of a Man; 'tis as clear as any Demonstration can be, that it must strike successively the two sides of the Room: 'Tis also evident, that it must touch one part of the Flesh first, and another after; and so in Succession: And yet I believe, no Body, who ever felt the pain of such a shot, or heard the blow against the two distant Walls, could perceive any Succession, either in the pain, or sound of so swift a stroke. Such a part of Duration as this, wherein we perceive no Succession, is that which we may call an *Instant*; and is *that which takes up the time of only one Idea* in our Minds, without the Succession of another, wherein therefore we perceive no Succession at all.

§. 11. This also happens, *where the Motion is so slow*, as not to supply a constant train of fresh *Ideas* to the Senses, as fast as the Mind is capable of receiving new ones into it; and so other *Ideas* of our own Thoughts, having room to come into our Minds, between those offered to our Senses by the moving Body, *there the Sense of Motion is lost*; and the Body, though it really move, yet not changing perceivable distance with some other Bodies, as fast as the *Ideas* of our own Minds do naturally follow one another in train, the thing seems to stand still, as is evident in the Hands of Clocks, and Shadows of Sun-dials, and other constant, but slow Motions, where though after certain Intervals, we perceive by the change of distance, that it hath moved, yet the Motion it self we perceive not.

§. 12. So that to me it seems, that *the constant and regular Succession of Ideas* in a waking Man, *are*, as it were, *the Measure and Standard of all other Succession*, which if it either exceeds their pace, as where two sounds or pains, &c. take up in their Succession the Duration of but one *Idea*; or else where any Motion or Succession is so slow, as that it keeps not pace with the *Ideas* in our Minds, or the quickness, in which they take their turns, as when any one, or more *Ideas* in their ordinary course come into our Mind between those which are offered to the sight, by the different perceptible distances of a Body in Motion, or between Sounds, or Smells, following one another, there also the Sense of a constant continued Succession is lost, and we perceive it not, but with certain gaps of rest between.

§. 13. If

§. 13. If it be so, that the *Ideas* of our Minds, whilst we have any there, do constantly change, and shift in a continual Succession, it would be impossible, may any one say, for a Man to think long of any one thing: By which if it be meant, that a Man may have one self-same single *Idea* a long time alone in his Mind, without any variation at all, I think, in Matter of Fact it is not possible, for which (not knowing how the *Ideas* of our Minds are framed, of what Materials they are made, whence they have their Light, and how they come to make their Appearances,) I can give no other Reason but Experience: and I would have any one try, whether he can keep one unvaried single *Idea* in his Mind without any other, for any considerable time together.

§. 14. For Trial, let him take any Figure, any Degree of Light or Whiteness, or what other he pleases; and he will, I suppose, find it difficult to keep all other *Ideas* out of his Mind: But that some, either of another kind, or various Consideration of that *Idea* (each of which Consideration is a new *Idea*) will constantly succeed one another in his Thoughts, let him be as wary as he can.

§. 15. All that is in a Man's Power in this Case, I think, is only to mind and observe what the *Ideas* are, that take their turns in his Understanding; or else, to direct the sort, and call in such as he hath a desire or use of: but hinder the constant Succession of fresh ones, I think he cannot, though he may commonly chuse, whether he will heedfully observe, and consider them.

§. 16. Whether these several *Ideas* in a Man's Mind be made by certain Motions, I will not here dispute: But this I am sure, that they include no *Idea* of Motion in their Appearance; and if a Man had not the *Idea* of Motion otherwise, I think, he would have none at all, which is enough to my present Purpose; and sufficiently shews, that the notice we take of the *Ideas* of our own Minds, appearing there one after another, is that which gives us the *Idea* of Succession and Duration, without which we should have no such *Ideas* at all. 'Tis not then, *Motion*, but the constant train of *Ideas* in our Minds, whilst we are waking, that furnishes us with the *Idea* of Duration, whereof Motion no otherwise gives us any Perception, than as it causes in our Minds a constant Succession of *Ideas*, as I have before shewed: and we have as clear an *Idea* of Succession, and Duration by the train of *Ideas* succeeding one another in our Minds, without the *Idea* of any Motion, as by the train of *Ideas* of the uninterrupted change of distance between two Bodies, which we have from Motion; and therefore we should as well have the *Idea* of Duration, were there no Sense of Motion at all.

§. 17. Having thus got the *Idea* of Duration, the next thing natural for the Mind to do, is to get some measure of this common Duration, whereby it might judge of its different lengths, and consider the distinct Order, wherein several things exist, without which a great part of our Knowledge would be confuted, and a great part of History be rendered very useless. This Consideration of Duration, as set out by certain Periods, and marked by certain Measures or *Epochs*, is that, I think, which most properly we call *Time*.

§. 18. In the measuring of Extension, there is nothing more required, but the Application of the Standard or Measure we make use of, to the thing of whose Extension we would be informed. But in the measuring of Duration, this cannot be done, because no two different parts of Succession can be put together to measure one another: And nothing being a measure of Duration, but Duration; as nothing is of Extension, but Extension, we cannot

not keep by us any standing unvarying measure of Duration, which consists in a constant fleeting Succession, as we can of certain lengths of Extension, as Inches, Feet, Yards, &c. marked out in permanent parts of Matter. Nothing then could serve well for a convenient measure of Time, but what has divided the whole length of its Duration into apparently equal Portions, by constantly repeated Periods : What Portions of Duration are not distinguished, or considered as distinguished and measured by such Periods, come not so properly under the Notion of Time, as appears by such Phrases as these, *viz. before all time, and when time shall be no more.*

§. 19. The diurnal, and annual *Revolutions of the Sun*, as having been from the beginning of Nature, constant, regular, and universally observable by all Mankind, and supposed equal to one another, have been with Reason made use of for the measure of Duration. But the distinction of Days and Years, having depended on the motion of the Sun, it has brought this mistake with it, that it has been thought, that Motion and Duration were the measure one of another. For Men in the measuring of the length of time, having been accustomed to the *Ideas* of Minutes, Hours, Days, Months, Years, &c. which they found themselves upon any mention of Time or Duration presently to think on, all which Portions of Time, were measured out by the motion of the Heavens, they were apt to confound time and motion ; or at least to think, that they had a necessary Connexion one with another : whereas any constant periodical Appearance, or Alteration of *Ideas* in seemingly equidistant Spaces of Duration, if constant and universally observable, would have as well distinguished the intervals of Time, as those that have been made use of. For supposing the Sun, which some have taken to be a Fire, had been lighted up at the same distance of time that it now every Day comes about to the same Meridian, and then gone out again about twelve hours after, and that in the Space of an annual Revolution, it had sensibly increased in Brightness and Heat, and so decreased again ; would not such regular Appearances serve to measure out the distances of Duration to all that could observe it, as well without as with Motion. For if the Appearances were constant, universally observable, and in equidistant Periods, they would serve Mankind for measure of time as well, were the Motion away.

§. 20. For the freezing of Water, or the blowing of a Plant, returning at equidistant Periods in all parts of the Earth, would as well serve Men to reckon their Years by, as the Motions of the Sun ; and in effect, we see that some People in *America* counted their Years by the coming of certain Birds amongst them at their certain Seasons, and leaving them at others. For any Idea returning constantly at equidistant Periods, as a Fit of an Ague ; the Sense of Hunger, or Thirst ; a Smell, or a Taste ; and making it self universally be taken notice of, would not fail to measure out the course of Succession, and distinguish the distances of Time. And we see that Men born blind, count Time well enough by Years, whose Revolutions yet they cannot distinguish by Motions, that they perceive not. And I ask, whether a blind Man, who distinguished his Years, either by heat of Summer, and cold of Winter ; by the smell of any Flower of the Spring, or taste of any Fruit of the Autumn, would not have a better measure of Time, than the *Romans* had before the Reformation of their Calendar by *Julius Cæsar*, or many other People, whose Years, notwithstanding the motion of the Sun, which they pretend to make use of, are very irregular ; and it adds no small difficulty to Chronology, that the exact lengths of the Years that several Nations counted by, are hard to be known, they differing very much

much one from another, and, I think, I may say all of them, from the precise motion of the Sun; and if the Sun moved from the Creation to the Flood constantly in the Equator, and so equally dispersed his light and heat to all the habitable Parts of the Earth, in Days all of the same length, without its annual variations to the Tropicks, as a late ingenious Author supposes, I do not think it very easie to imagine, that (notwithstanding the motion of the Sun) Men should in the *Antediluvian* World, from the beginning count by years, or measure their time by Periods that had no sensible marks very obvious to distinguish them by.

§. 21. But, perhaps, it will be said without a regular Motion, such as of the Sun, or some other, how could it ever be known that such Periods were equal? To which I answer, the Equality of any other returning appearances might be known by the same way that that of Days was known, or presumed to be so at first, which was only by judging of them by the train of *Ideas* had passed in Men's Minds in the Intervals, whereby they guessed them to be equal, which was sufficient to make them serve for a measure; though since exacter search has discovered inequality in the diurnal Revolutions of the Sun, and we know not whether the Annual also be not unequal. Those yet by their presum'd and apparent Equality, serve as well to reckon time by, though not to measure the parts of Duration exactly, as if they could be proved to be exactly equal; we must therefore carefully distinguish betwixt Duration it self, and the measures we make use of to judge of its length. Duration in it self is to be considered, as going on in one constant equal uniform Course; but none of the measures of it we make use of can be known to do so, nor can we be assured that their assigned Parts or Periods are equal in Duration one to another; for two successive lengths of Duration however measured, can never be demonstrated to be equal. That which the World used so long, and so confidently for an exact measure of Duration, the motion of the Sun has, as I said, been found in its several parts unequal: and though Men have of late made use of a Pendulum, as a more steady and regular Motion, than that of the Sun or (to speak more truly) of the Earth; yet if any one should be asked, how he certainly knows that the two successive swings of a Pendulum are equal, it would be very hard to satisfy himself, that they are infallibly so: since we cannot be sure, that the Cause of that Motion which is unknown to us, shall always operate equally; and we are sure, that the Medium in which the Pendulum moves, is not constantly the same; either of which varying, may alter the Equality of such Periods, and thereby destroy the certainty and exactness of the measure by Motion, as well as any other Periods of other Appearances, the Notion of Duration still remaining clear, though our measures of it cannot any of them be demonstrated to be exact. Since then no two Portions of Succession can be brought together, it is impossible ever certainly to know their Equality. All that we can do for a measure of Time, is to take such as have continual successive Appearances at seemingly equidistant Periods; of which *seeming Equality, we have no other measure, but such as the train of our own Ideas* have lodged in our Memories, with the concurrence of other probable Reasons, to persuade us of their Equality.

§. 22. One thing seems strange to me, that whilst all Men manifestly measured Time by the motion of the great and visible Bodies of the World, Time yet should be defined to be the *measure of Motion*; whereas 'tis obvious to every one that reflects ever so little on it, that to measure Motion, Space is as necessary to be considered as Time; and those who look a little farther, will find also the bulk of the thing moved necessary to be

taken into the Computation, by any one who will estimate or measure Motion, so as to judge right of it. Nor, indeed, does Motion any other-wise conduce to the measuring of Duration, than as it constantly brings about the return of certain sensible *Ideas*, in seeming equidistant Periods. For if the Motion of the Sun, were as unequal as of a Ship driven by unsteady Winds, sometimes very slow, and at others, irregularly very swift; or if being constantly equally swift, it yet was not circular, and produced not the same Appearances, it would not at all help us to measure time, any more than the seeming unequal motion of a Comet does.

§. 23. *Minutes, Hours, Days, and Years*, are then no more necessary to Time or Duration, than Inches, Feet, Yards, and Miles, marked out in any Matter, are to Extension. For though we in this part of the Universe, by the constant use of them, as Periods set out by the Revolutions of the Sun, or known parts of them, have fixed the *Ideas* of such Lengths of Duration in our Minds, which we apply to all parts of Time, whose Lengths we would consider; yet there may be other parts of the Universe, where they no more use those measures of ours, than in *Japan* they do our Inches, Feet, or Miles: but yet something Analagous to them, there must be. For without some regular periodical returns, we could not measure our selves, or signify to others the length of any Duration, though at the same time the World were as full of Motion, as it is now; but no part of it disposed into regular and apparent equidistant Revolutions. But the different measures that may be made use of for the account of Time, do not at all alter the notion of Duration, which is the thing to be measured, no more than the different standards of a Foot and a Cubit alter the notion of Extension, to those, who make use of those different Measures.

§. 25. The Mind having once got such a measure of Time, as the annual Revolution of the Sun, can apply that measure to Duration, wherein that measure it self did not exist, and with which in the reality of its being, it had nothing to do: For should one say, That *Abraham* was born in the 2712 year of the *Julian* period, it is altogether as intelligible as reckoning from the beginning of the World, though there were so far back no motion of the Sun, nor any other motion at all. For though the *Julian* Period be supposed to begin several hundred years before there were really either Days, Nights, or Years, marked out by any Revolutions of the Sun, yet we reckon as right, and thereby measure Durations as well, as if really at that time the Sun had existed, and kept the same ordinary motion it doth now. The *Idea of Duration equal to an annual Revolution of the Sun*, is as easily applicable in our Thoughts to Duration, where no Sun nor Motion was, as the *Idea* of a Foot or Yard taken from Bodies here, can be applied in our Thoughts to Distances, beyond the Confines of the World, where are no Bodies at all.

§. 26. For supposing it were 5639 miles, or millions of Miles, from this place to the remotest Body of the Universe, (for being finite, it must be at a certain distance,) as we suppose it to be 5639 years, from this time to the first existence of any Body in the beginning of the World, we can, in our Thoughts, apply this measure of a Year to Duration before the Creation, or beyond the Duration of Bodies or Motion, as we can this measure of a Mile to Space beyond the utmost Bodies; and by the one measure Duration, where there was no Motion, as well as by the other measure Space in our Thoughts, where there is no Body.

§. 27. If it be objected to me here, That in this way of explaining of Time, I have beg'd what I should not, viz. That the World is neither eternal, nor infinite; I answer, That to my present purpose, it is not need.

needful, in this place, to make use of Arguments, to evince the World to be finite, both in Duration and Extension: But it being at least as conceivable as the contrary, I have certainly the liberty to suppose it, as well as any one hath to suppose the contrary; and I doubt not but that *every one* that will go about it, may easily *conceive* in his Mind *the beginning of Motion, though not of all Duration*; and so may come to a stop, and *non ultra* in his Consideration of Motion: so also in his Thoughts he may set limits to Body, and the Extension belonging to it, but not to Space where no Body is, the utmost bounds of Space and Duration being beyond the reach of Thoughts, as well as the utmost bounds of Number are beyond the largest comprehension of the Mind, and all for the same reason, as we shall see in another place.

§. 28. By the same means therefore, and from the same Original that we come to have *the Idea of Time*, we have also that *Idea* which we call *Eternity, viz.* having got the *Idea* of Succession and Duration, by reflecting on the Train of our own *Ideas*, caused in us either by the natural appearances of those *Ideas*, coming constantly of themselves into our waking Thoughts, or else caused by external Objects successively affecting our Senses; and having from the Revolutions of the Sun got the *Ideas* of certain lengths of Duration, we can, in our Thoughts, add such lengths of Duration to one another, as often as we please, and apply them, so added, to Durations past or to come: And this we can continue to do on, without bounds or limits, and proceed *in infinitum*, and apply thus the length of the annual motion of the Sun to Duration, supposed before the Sun's, or any other Motion had its being; which is no more difficult or absurd, than to apply the Notion I have of the moving of a Shadow, one Hour to day upon the Sun-dial, to the duration of something last night; *v.g.* The burning of a Candle, which is now absolutely separate from all actual motion, and it is impossible for the duration of that Flame for an hour last night, to co-exist with any Motion that now is, or for ever shall be, as for any part of Duration, that was before the beginning of the World to co-exist with the motion of the Sun now. But yet this hinders not, but that having the *Idea* of the length of the Motion of the Shadow on a Dial, between the Marks of two Hours, I can as distinctly measure in my Thoughts the Duration of that Candle last night, as I can any thing that does now exist: And it is no more than to think, that had the Sun shone then on the Dial, and moved after the same rate it doth now, the shadow on the Dial would have passed from one Hour-line to another, whilst that Flame of the Candle lasted.

§. 29. The notion of an Hour, Day, or Year, being only the *Idea* I have of the length of certain periodical regular Motions, neither of which Motions do ever all at once exist, but only in the *Ideas* I have of them in my Memory derived from my Senses or Reflection, I can with the same ease, and for the same reason, apply in my Thoughts to Duration, antecedent to all manner of Motion, as well as to any thing that is but a Minute, or a Day, antecedent to this present Motion that at this very moment the Sun is in. All things past are equally and perfectly at rest; and to this way of consideration of them, are all one, whether they were before the beginning of the World, or but yesterday; *the measuring of any Duration*, by some motion, depending not at all on the real co-existence of that thing to that motion, or any other Periods of Revolution, but the having a *clear Idea of the length of some periodical known Motion*, or other intervals of *Duration* in my Mind, and applying that to the *Duration of the thing I would measure*.

§. 30. Hence we see, that some Men imagine the Duration of the World from its first existence, to this present year 1689. to have been 5639 years, or equal to 5639 annual Revolutions of the Sun, and others a great deal more; as the *Egyptians* of old, who in the time of *Alexander* counted 23000 years, from the Reign of the Sun; and the *Chineses* now, who account the World 3,269,000 years old, or more; which longer duration of the World, according to their Computation, though I should not believe to be true, yet I can equally imagine it with them, and as truly understand, and say one is longer than the other, as I understand that *Methusalem's* life was longer than *Enoch's*: And if the common reckoning of 5639 should be true, (as it may be, as well as any other assigned,) it hinders not at all my imagining what others mean, when they make the World a 1000 years older, since every one may with the same Facility imagine (I do not say believe) the World to be 50000 years old, as 5639; and may as well conceive the duration of 50000 years, as 5639. Whereby it appears, that to the measuring the duration of any thing by Time, it is not requisite, that that thing should be co-existent to the Motion we measure by, or any other periodical Revolution; but it suffices to this purpose, that we have the Idea of the length of any regular periodical appearances, which we can in our Minds apply to Duration, with which the Motion or Appearance never co-existed.

§. 31. For as in the History of the Creation delivered by *Moses*, I can imagine that Light existed three days before the Sun was, or had any motion, barely by thinking, that the duration of Light before the Sun was created, was so long as (if the Sun had moved then, as it doth now,) would have been equal to three of his diurnal Revolutions; so by the same way I can have an Idea of the *Chaos*, or Angels, being created before there was either Light, or any continued motion, a Minute, an Hour, a Day, a Year, or 1000 Years. For if I can but consider Duration equal to one Minute, before either the Being or Motion of any Body, I can add one more Minute till I come to 60. And by the same way of adding Minutes, Hours, or Years, (*i.e.* such or such parts of the Sun's revolution, or any other period whereof I have the Idea,) proceed in infinitum. And suppose a duration exceeding as many such periods as I can reckon, let me add whilst I will, which I think is the notion we have of *Eternity*, of whose infinity we have no other notion, than we have of the infinity of Number, to which we can add for ever without end.

§. 32. And thus I think it is plain, that from those two Fountains of all Knowledge before mentioned, (*viz.*) *Reflection* and *Sensation*, we get the Ideas of Duration, and the measures of it.

For First, By observing what passes in our Minds, how our Ideas there in train constantly some vanish, and others begin to appear, we come by the Idea of Succession.

Secondly, By observing a distance in the parts of this Succession, we get the Idea of Duration.

Thirdly, By Sensation observing certain appearances, at certain regular and seeming equidistant periods, we get the Ideas of certain Lengths or Measures of Duration, as Minutes, Hours, Days, Years, &c.

Fourthly, By being able to repeat those Measures of Time, or Ideas of stated length of Duration in our Minds, as often as we will, we can come to imagine Duration, where nothing does really endure or exist; and thus we imagine to morrow, next year, or seven years hence.

Fifthly,

Fifthly, By being able to repeat any such *Idea* of any length of Time, as of a Minute, a Year, or an Age, as often as we will in our own Thoughts, and add them one to another, without ever coming to the end of such addition, any nearer than we can to the end of Number, to which we can always add, we come by the *Idea* of *Eternity*, as the future eternal Duration of our Souls, as well as the Eternity of that infinite Being, which must necessarily have always existed.

Sixthly, By considering any part of infinite Duration, as set out by periodical Measures, we come by the *Idea* of what we call *Time* in general.

CH A P. XV.

Of Duration and Expansion, considered together.

§.1. **T**Hough we have in the precedent Chapters dwelt pretty long on the Considerations of Space and Duration; yet they being *Ideas* of general concernment, that have something very obstruse and peculiar in their Nature, the comparing them one with another may, perhaps, be of use for their illustration; and we may have the more clear and distinct conception of them, by taking a view of them together. Distance or Space, in its simple abstract conception, to avoid confusion, I call *Expansion*, to distinguish it from *Extension*, which by some is used to express this distance only as it is in the solid parts of Matter, and so includes, or at least intimates the *Idea* of Body: Whereas the *Idea* of pure Distance includes no such thing. I prefer also the Word *Expansion* to *Space*, because *Space* is often applied to Distance of fleeting successive parts, which never exist together, as well as to those which are permanent. In both these (*viz.*) *Expansion* and *Duration*, the Mind has this common *Idea* of continued Lengths, capable of greater, or less quantities: For a Man has as clear an *Idea* of the difference of the length of an Hour, and a Day, as of an Inch and a Foot.

§. 2. The *Mind*, having got the *Idea* of the length of any part of *Expansion*, let it be a Span, or a Pace, or what length you will, can, as has been said, repeat that *Idea*; and so adding it to the former, *enlarge its Idea of Length*, and make it equal to two Spans, or two Paces, and so as often as it will, till it equals the distance of any parts of the Earth one from another, and increase thus, till it amounts to the distance of the Sun, or remotest Star. By such a progression as this, setting out from the place where it is, or any other place, it can proceed and pass beyond all those lengths, and find nothing to stop its going on, either in, or without Body. 'Tis true, we can easily in our Thoughts come to the end of solid Extension; the extremity and bounds of all Body, we have no difficulty to arrive at: But when the Mind is there, it finds nothing to hinder its progress into this endless Expansion; of that it can neither find nor conceive any end. Nor let any one say, That beyond the bounds of Body, there is nothing at all, unless he will confine GOD within the limits of Matter. Solomon, whose Understanding was filled and enlarged with Wisdom, seems to have other Thoughts, when he says, *Heaven, and the Heaven of Heavens, cannot contain Thee*: And he, I think, very much magnifies to himself the Capacity of his own Understanding, who persuades himself, that he can extend his Thoughts

Thoughts farther than GOD exists, or imagine any Expansion where he is not.

§. 3. Just so is it in Duration. *The Mind having got the Idea of any length of Duration, can double, multiply, and enlarge it*, not only beyond its own, but beyond the existence of all corporeal Beings, and all the measures of Time, taken from the great Bodies of the World, and their Motions. But yet every one easily admits, That though we make Duration boundless, as certainly it is, we cannot yet extend it beyond all being. GOD, every one easily allows, fills Eternity; and 'tis hard to find a Reason, why any one should doubt, that he likewise fills Immensity: His infinite Being is certainly as boundless one way as another; and methinks it ascribes a little too much to Matter, to say, Where there is no Body, there is nothing.

§. 4. Hence, I think, we may learn the Reason, *why every one* familiarly, and without the least hesitation, speaks of, and supposes Eternity, and sticks not to *ascribe Infinity to Duration*; but 'tis with more doubting and reserve, that many *admit*, or suppose *the Infinity of Space*. The reason whereof seems to me to be this, That Duration and Extension being used as names of affections belonging to other Beings, we easily conceive in GOD infinite Duration, and we cannot avoid doing so; but not attributing to him Extension, but only to Matter, which is finite, we are apter to doubt of the existence of Expansion without Matter; of which alone we commonly suppose it an Attribute: And therefore when Men pursue their Thoughts of Space, they are apt to stop at the confines of Body; as if Space were there at an end too, and reached no farther: Or if their *Ideas* upon consideration carry them farther, yet they term what is beyond the limits of the Universe, imaginary Space; as if it were nothing, because there is no Body existing in it. Whereas Duration, antecedent to all Body, and the motions it is measured by, they never term imaginary, because it is never supposed void of some other real existence. And if the names of things may at all direct our Thoughts towards the Originals of Mens *Ideas*, (as I am apt to think they may very much,) one may have occasion to think by the name *Duration*, that the continuation of Existence, with a kind of Resistance to any destructive force, and the continuation of Solidity, (which is apt to be confounded with, and if we will look into the minute atomical parts of Matter, is little different from Hardness,) were thought to have some Analogy, and gave occasion to Words, so near of kin as *Durare* and *Durum esse*. But be that as it will, this is certain, That whoever pursues his own Thoughts, will find them sometimes lanch out beyond the extent of Body, into the Infinity of Space or Expansion; the *Idea* whereof is distinct and separate from Body, and all other things; which may (to those who please) be a subject of farther meditation.

§. 5. *Time* in general is to *Duration*, as *Place* to *Expansion*. They are so much of those boundless Oceans of Eternity and Immensity, as is set out and distinguished from the rest, as it were by Landmarks; and so are made use of, to denote the Position of finite real Beings, in respect one to another, in those uniform infinite Oceans of Duration and Space. These rightly considered, are nothing but *Ideas* of determinate Distances, from certain known points fixed in distinguishable sensible things, and supposed to keep the same distance one from another. From such points fixed in sensible Beings we reckon, and from them we measure out Portions of those infinite Quantities; which so considered, are that which we call Time and Place. For Duration and
Space

Space being in themselves uniform and boundless, the Order and Position of things, without such known settled Points, would be lost in them; and all things would lie jumbled in an incurable Confusion.

§. 6. *Time* and *Place* taken thus, for determinate distinguishable Portions of those infinite Abysses of Space and Duration, set out, or supposed to be distinguished from the rest, by marks, and known Boundaries, have each of them a two-fold Acceptation.

First, *Time* in general is commonly taken for so much of infinite Duration, as it measured out by, and co-existent with the Existence, and Motions of the great Bodies of the Universe, as far as we know any thing of them; and in this Sense, *Time* begins and ends with the frame of this sensible World, as in these Phrases before mentioned, *before all time*, or *when time shall be no more*. *Place* likewise is taken sometimes for that Portion of infinite Space, which is possessed by, and comprehended within the Material World; and is thereby distinguished from the rest of Expansion; though this may more properly be called *Extension*, than *Place*. Within, these two are confined, and by the observable Parts of them are measured and determined the particular *Time* or *Duration*, and the particular *Extension*, and *Place* of all corporeal Beings.

§. 7. *Secondly*, Sometimes the word *Time* is used in a larger sense, and is applied to Parts of that infinite Duration, not that were really distinguished and measured out by this real Existence, and periodical Motions of Bodies, that were appointed from the Beginning to be for Signs, and for Seasons, and for Days, and Years, and are accordingly our measures of time; but such other portions too of that infinite uniform Duration, which we upon any occasion do suppose equal to certain lengths of measured *Time*; and so consider them as bounded and determined. For if we should suppose the Creation, or Fall of the Angels, was at the Beginning of the *Julian* Period, we should speak properly enough, and should be understood, if we said, 'tis a longer time since the Creation of Angels, than the Creation of the World, by 764 years: Whereby we would mark out so much of that undistinguished Duration, as we suppose equal to, and would have admitted, 764 annual Revolutions of the Sun, moving at the rate it now does. And thus likewise, we sometimes speak of *Place*, *Distance*, or *Bulk* in the great Inane, beyond the Confines the World, when we consider so much of that Space, as is equal to, or capable to receive a Body of any assigned Dimensions, as a Cubick-foot; or do suppose a Point in it, at such a certain distance from any part of the Universe.

§. 8. *Where* and *when* are Questions belonging to all finite Existences, and are by us always reckoned from some known Parts of this sensible World, and from some certain Epochs marked out to us by the Motions observable in it. Without some such fixed Parts or Periods, the Order of things would be lost, to our finite Understandings, in the boundless invariable Oceans of Duration and Expansion; which comprehend in them all finite Beings, and in their full Extent, belong only to the Deity. And therefore we are not to wonder, that we comprehend them not, and do so often find our Thoughts at a loss, when we would consider them, either abstractly in themselves, or as any way attributed to the first incomprehensible Being. But when applied to any particular finite Beings, the Extension of any Body is so much of that infinite Space, as the bulk of that Body takes up. And *Place* is the Position of any Body, when considered at a certain distance from some other. As the *Idea* of the particular *Duration* of any thing, is an *Idea* of that Portion of infinite *Duration*, which passes during the Existence of that thing; so
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the time *when* the thing existed, is the *Idea* of that Space of Duration, which passed between some known and fixed Period of Duration, and the Being of that thing. One shews the distance of the Extremities of the Bulk, or Existence of the same thing, as that it is a Foot Square, or lasted two Years; the other shews the distance of it in Place, or Existence from other fixed points of Duration or Space; as that it was in the middle of *Lincolns-Inn-Fields*, or the first degree of *Taurus*, and in the year of our Lord, 1671. or the 1000 year of the *Julian Period*: All which distances, we measure by preconceived *Ideas* of certain lengths of Space and Duration, as Inches, Feet, Miles, and Degrees, and in the other Minutes, days and years, &c.

§. 9. There is one thing more, wherein *Space and Duration* have a great Conformity, and that is, though they are justly reckoned amongst our *simple Ideas*: Yet none of the distinct *Ideas* we have of either is without all manner of *Composition*, it is the very Nature of both of them to consist of Parts: But their Parts being all of the same kind, and without the mixture of any other *Idea*, hinder them not from having a Place amongst *simple Ideas*. Could the Mind, as in Number, come to so small a part of Extension or Duration, as excluded Divisibility, that would be, as it were, the indivisible Unite, or *Idea*; by repetition of which, it would make its more enlarged *Ideas* of Extension and Duration. But since the Mind is not able to frame an *Idea* of any Space, without Parts; instead thereof it makes use of the common Measures, which by familiar use, in each Country, have imprinted themselves on the Memory (as Inches, and Feet; or Cubits, and Parasangs; and so Seconds, Minutes, Hours, Days, and Years in Duration :) The Mind makes use, I say, of such *Ideas* as these, as simple ones; and these are the component Parts of larger *Ideas*, which the Mind, upon Occasion, makes by the addition of such known Lengths, which it is acquainted with: On the other side, the ordinary smallest measure we have of either, look'd on as an Unite in Number, when the Mind by division would reduce them into less Fractions. Though on both sides, both in addition and division, either of Space or Duration, when the *Idea* under Consideration becomes very big, or very small, the *Idea* of its precise Bulk becomes very obscure and confused; and it is the Number of its repeated additions, or divisions, that alone remains clear and distinct, as will easily appear to any one, who will let his Thoughts loose in the vast Expansion of Space, or Divisibility of Matter. Every part of Duration is Duration too; and every part of Extension is Extension, both of them capable of addition or division *in infinitum*. But the least Portions of either of them, whereof we have clear and distinct *Ideas*, may, perhaps, be fittest to be considered by us, as the *simple Ideas* of that kind, out of which our complex modes of Space, Extension, and Duration, are made up, and into which they can again be distinctly resolved. Such a small part in Duration, may be called a *Moment*, and is the time of one *Idea* in our Minds, in the train of their ordinary Succession there. The other, wanting a proper Name, I know not whether I may be allowed to call a *sensible Point*, meaning thereby the least Particle of Matter or Space we can discern, which is ordinarily about a Second of a Circle, whereof the Eye is the Centre.

§. 10. Expansion, and Duration have this farther Agreement, that though they are both considered by us as having Parts; yet *their Parts* are *not separable* one from another, no not even in Thought: Though the parts of Bodies, from whence we take our measure of the one; and the parts of Motion, or rather the succession of *Ideas* in our Minds, from whence

whence we take the measure of the other, may be interrupted and separated; as the one is often by Rest, and the other is by Sleep, which we call rest too.

§. 11. But yet there is this manifest difference between them, That the *Ideas of Length*, we have of *Expansion*, are turned every way, and so make Figure, and Breadth, and Thickness; but *Duration* is but as it were the length of one straight Line, extended in infinitum, not capable of Multiplicity, Variation, or Figure; but is one common measure of all Existence whatsoever, wherein all things whilst they exist, equally partake. For this present moment is common to all things, that are now in being, and equally comprehends that part of their Existence, as much as if they were all but one single Being; and we may truly say, they all exist in the same moment of Time. Whether Angels and Spirits have any Analogy to this, in respect of Expansion, is beyond my Comprehension: and, perhaps, for us, who have Understandings and Comprehensions, suited to our own Preservation, and the ends of our own Being, but not to the reality and extent of all other Beings, 'tis near as hard to conceive any Existence, or to have an *Idea* of any real Being, with a perfect Negation of all manner of Expansion; as it is, to have the *Idea* of any real Existence, with a perfect Negation of all manner of Duration: And therefore what Spirits have to do with Space, or how they communicate in it, we know not. All that we know is, that Bodies do each singly possess its proper Portion of it, according to the extent of its solid Parts; and thereby exclude all other Bodies from having any share in that particular portion of Space, whilst it remains there.

§. 12. *Duration* and Time, which is a part of it, is the *Idea* we have of perishing distance, of which no two parts exist together, but follow each other in Succession; as *Expansion* is the *Idea* of lasting distance, all whose parts exist together, and are not capable of Succession. And therefore though we cannot conceive any Duration without Succession, nor can put it together in our Thoughts, that any Being does now exist to Morrow, or possess at once more than the present moment of Duration; yet we can conceive the eternal Duration of the Almighty far different from that of Man, or any other finite Being. Because Man comprehends not in his Knowledge, or Power, all past and future things: His Thoughts are but of yesterday, and he knows not what to morrow will bring forth. What is once passed, he can never recal; and what is yet to come, he cannot make present. What I say of Man, I say of all finite Beings, who though they may far exceed Man in Knowledge and Power, yet are no more than the meanest Creature, in comparison with God himself. Finite of any Magnitude, holds not any proportion to infinite. God's infinite Duration being accompanied with infinite Knowledge, and infinite Power, he sees all things past and to come; and they are no more distant from his Knowledge, no farther removed from his sight, than the present: They all lie under the same view: And there is nothing, which he cannot make exist each moment he pleases. For the Existence of all things, depending upon his good Pleasure; all things exist every moment, that he thinks fit to have them exist. To conclude, Expansion and Duration do mutually imbrace, and comprehend each other, every part of Space, being in every part of Duration; and every part of Duration, in every part of Expansion. Such a Combination of two distinct *Ideas*, is, I suppose, scarce to be found in all that great Variety, we do or can conceive, and may afford Matter to farther Speculation.

CHAP. XVI.

Of Number.

§. 1. **A**mongst all the *Ideas* we have, as there is none suggested to the Mind by more ways, so there is none more simple than that of *Unity*, or *One*, it has no shadow of Variety nor Composition in it: every Object our Senses are employed about; every *Idea* in our Understandings; every Thought of our Minds brings this *Idea* along with it: And therefore it is the most intimate to our Thoughts, as well as it is in its Agreement to all other things, the most universal *Idea* we have: For Number applies it self to Men, Angels, Actions, Thoughts, every thing, that either doth exist, or can be imagined.

§. 2. By repeating this *Idea* in our Minds, and adding the Repetitions together, we come by the complex *Ideas of the Modes of it*. Thus by adding one to one, we have the complex *Idea* of two; by putting twelve Unites together, we have the complex *Idea* of a dozen; and so of a Score, or a Milion, or any other Number.

§. 3. *The simples modes of Number are of all other the most distinct*; every the least Variation, which is an unite, making each Combination, as clearly different from that which approacheth nearest to it, as the most remote; two being as distinct from one, as Two hundred; and the *Ideas* of Two, as distinct from the *Idea* of Three, as the Magnitude of the whole Earth, is from that of a Mite. This is not so in other simple Modes, in which it is not so easie, nor, perhaps, possible for us to distinguish betwixt two approaching *Ideas*, which yet are really different. For who will undertake to find a difference between the white of this Paper, and that of the next degree to it? Or can form distinct *Ideas* of every the least excess in Extension?

§. 4. The Clearness and *Distinctness* of each mode of Number from all others, even those that approach nearest, makes me apt to think, that Demonstrations in Numbers, if they are not more evident and exact than in Extension, yet they are more general in their use, and more determinate in their Application. Because the *Ideas* of Numbers are more precise, and distinguishable than in Extension; where every Equality and Excess are not so easie to be observed, or measured, because our Thoughts cannot in Space arrive at any determined smallness beyond which it cannot go, as in an Unite; and therefore the quantity or proportion of any the least Excess cannot be discovered, which is clear otherwise in Number, where, as has been said, 91 is as distinguishable from 90, as from 9000, though 91 be the next immediate Excess to 90. But it is not so in Extension, where whatsoever is more than just a Foot, or an Inch, is not distinguishable from the Standard of a Foot; or an Inch; and in Lines which appear of an equal length, one may be longer than the other by innumerable Parts: Nor can any one assign an Angle, which shall be the next biggest to a right one.

§. 5. By the repeating, as has been said, of the *Idea* of an Unite, and joining it to another Unite, we make thereof one collective *Idea*, marked by the Name *Two*. And whosoever can do this, and proceed on, still adding one more to the last collective *Idea* he had of any Number, and give a Name to it, may count, or have *Ideas* for several Collections of Unites,

Unites distinguished one from another, as far as he hath a Series of Names for following Numbers, and a Memory to retain that Series, with their several Names: All *Numeration* being but still the adding of one Unite more, and giving to the whole together, as comprehended in one *Idea*, a new or distinct Name or Sign, whereby to know it from those before and after, and distinguish it from every smaller or greater multitude of Unites: So that he that can add one to one, and so to two, and so go on with his Tale, taking still with him the distinct Names belonging to every Progression; and so again by subtracting an Unite from each Collection retreat and lessen them, is capable of all the *Ideas* of Numbers, within the compass of his Language, or for which he hath names, though not, perhaps, of more. For the several simple Modes of Numbers being in our Minds but so many Combinations of Unites, which have no variety, nor are capable of any other difference, but more or less, Names or Marks for each distinct Combination, seem more necessary than in any other sort of *Ideas*. For without such Names or Marks, we can hardly well make use of Numbers in reckoning, especially where the Combination is made up of any great multitude of Unites, which put together without a Name or Mark, to distinguish that precise Collection, will hardly be kept from being a heap in Confusion.

§. 6. This, I think, to be the reason why some *Americans* I have spoken with, (who were otherwise of quick and rational Parts enough,) could not, as we do, by any means count to 1000; nor had any distinct *Idea* of that Number, though they could reckon very well to 20. Because their Language being scanty, and accommodated only to the few necessities of a needy simple Life, unacquainted either with Trade or Mathematics, had no Words in it to stand for 1000; so that when they were discoursed with of those greater Numbers, they would shew the Hairs of their Head, to express a great multitude which they could not number; which inability, I suppose, proceeded from their want of Names. The *Tououpinambos* had no Names for Numbers above 5; any Number beyond that, they made out by shewing their Fingers, and the Fingers of others who were present: *Histoire d'un Voyage fait en la Terre du Brasil, par Jean de Lery*, c. 20. ²⁸. And I doubt not but we our selves might distinctly number in Words, a great deal farther than we usually do, would we find out but some fit denominations to signify them by; whereas in the way we take now to name them by Millions of Millions of Millions, it is hard to go beyond eighteen, or at most four and twenty decimal Progressions, without confusion. But to shew how much *distinct Names conduce to our well reckoning*, or having useful *Ideas* of Numbers, let us set all these following Figures in one continued Line, as the Marks of one Number: v. g.

Nonillions. Octillions. Septillions. Sextillions. Quintillions. Quadrillions. Trillions. Billions. Millions. Unites.
857324. 162486. 345896. 437916. 423147. 248106. 235421. 261734. 368149. 623137.

The ordinary way of naming this Number in *English*, will be the often repeating of Millions, of Millions, of Millions, of Millions, of Millions, of Millions, of Millions, (which is the denomination of six second Figures.) In which way, it will be very hard to have any distinguishing Notions of this Number: But whether, by giving every six Figures a new and orderly denomination, these, and perhaps a great many more Figures, in progression, might not easily be counted distinctly, and *Ideas* of them both got more easily to our selves, and more plainly signified to others, I leave it to be considered. This I mention only to shew how necessary

cessary distinct Names are to Numbering, without pretending to introduce new ones of my invention.

§. 7. Thus Children, either for want of Names to mark the several Progressions of Numbers, or not having yet the faculty to collect scattered *Ideas* into complex ones, and range them to a regular Order, and so retain them in their Memories, as is necessary to reckoning, do not begin to number very early, nor proceed in it very far or steadily, till a good while after they are well furnished with good store of other *Ideas*; and one may often observe them in discourse and reason pretty well, and have very clear conceptions of several other things, before they can tell 10. And some, through the default of their Memories, who cannot retain the several Combinations of Numbers, with their Names annexed in their distinct orders, and the dependence of so long a train of numeral Progressions, and their relation one to another, are not able all their life-time, to reckon or regularly go over any moderate Series of Numbers. For he that will count Twenty, or have any *Idea* of that Number, must know that Nineteen went before, with the distinct Name or Sign of every one of them, as they stand marked in their order; for where-ever this fails, a gap is made, the Chain breaks, and the Progress in numbering can go no farther. So that *to reckon right, it is required*, 1. That the Mind distinguish carefully two *Ideas*, which are different one from another only by the addition or subtraction of one Unite. 2. That it retain in memory the Names, or Marks, of the several Combinations from an Unite to that Number; and that not confusedly, and at random, but in that exact order, that the Numbers follow one another; in either of which if it trips, the whole business of Numbring will be disturbed; and there will remain only the confused *Idea* of multitude, but the *Ideas* necessary to distinct numeration, will not be attained to.

§. 8. This farther is observable in *Number*, That it is that which the Mind makes use of, in *measuring all things* that by us are measurable, which principally are *Expansion* and *Duration*; and our *Idea* of Infinity, even when applied to those, seems to be nothing but the Infinity of Number. For what else are our *Ideas* of Eternity and Immensity, but the repeated additions of certain *Ideas* of imagined parts of Space and Expansion, or Duration, with the Infinity of Number, in which we can come to no end of Addition? For such an inexhaustible stock, Number, of all other our *Ideas*, most clearly furnishes us with, as is obvious to every one: For let a Man collect into one Sum, as great a Number as he pleases, this Multitude, how great soever, lessens not one jot the power of adding to it, or brings him any nearer the end of the inexhaustible stock of Number, where still there remains as much to be added, as if none were taken out. And this endless addition of Numbers, so apparent to the Mind, is that, I think, which gives us the clearest and most distinct *Idea* of Infinity; of which more in the following Chapter.

C H A P. XVII.

Of Infinity.

§. 1. **H**E that would know what kind of *Idea* it is to which we give the name of *Infinity*, cannot do it better than by considering to what Infinity is by the Mind more immediately attributed, and then how the Mind comes to frame it.

Finite, and *Infinite*, seem to me to be looked upon by the Mind, as the *Modes of Quantity*, and to be attributed primarily in their first designation only to those things which have parts, and are capable of increase or diminution, by the addition or subtraction of any the least part; and such are the *Ideas* of Space, Duration, and Number, which we have considered in the foregoing Chapters. 'Tis true, that we cannot but be assured, That the Great GOD, of whom, and from whom are all things, is incomprehensibly Infinite; but yet, when we apply to that first and supreme Being, our *Idea* of Infinite in our weak and narrow Thoughts, we do it primarily in respect of his Duration and Ubiquity; and, I think, more figuratively to his Power, Wisdom, and Goodness, and other Attributes, which are properly inexhaustible and incomprehensible, &c. For when we call them Infinite, we have no other *Idea* of this Infinity, but what carries with it some reflection on, and imitation of that Number or Extent of the Acts or Objects of God's Power, Wisdom, and Goodness, which can never be supposed so great, or so many, which these Attributes will not always surmount and exceed, let us multiply them in our Thoughts with all the infinity of endless number. I do not pretend to say how these Attributes are in GOD, who is infinitely beyond the reach of our narrow Capacities: They do without doubt contain in them all possible perfection; but this, I say, is our way of conceiving them, and these our *Ideas* of their Infinity.

§. 2. Finite then, and Infinite, being by the Mind looked on as modifications of Expansion and Duration, the next thing to be considered is, *How the Mind comes by them*. As for the *Idea of Finite*, there is no great difficulty; the obvious portions of Extension, that affect our Senses, carry with them into the Mind the *Idea* of Finite, and the ordinary periods of Succession, whereby we measure Time and Duration; as Hours, Days, and Years, are bounded Lengths: the difficulty is, how we come by those boundless *Ideas* of *Eternity* and *Immensify*, since the Objects we converse with, come so much short of any approach or proportion to that Largeness.

§. 3. Every one that has any *Idea* of any stated lengths of Space, as a Foot, finds that he can repeat that *Idea*; and joining it to the former, make the *Idea* of two Foot; and by the addition of a third, three Foot; and so on without ever coming to an end of his additions, whether of the same *Idea* of a Foot, or if he please of doubling it, or any other *Idea* he has of any length, as a Mile, or Diametre of the Earth, or of the *Orbis Magnus*; for which-ever of these he takes, and how often soever he doubles, or any otherwise multiplies it, he finds that after he has continued this doubling in his Thoughts, and enlarged his *Idea* as much as he pleases, he has no more reason to stop, nor is one jot nearer the end of such Addition, than he was at first setting out; the power of enlarging his *Idea* of
Space

Space by farther Additions, remaining still the same, he hence takes the *Idea of infinite Space*.

§. 4. This, I think, is the way whereby the Mind gets the *Idea of infinite Space*. 'Tis a quite different Consideration to examine, whether the Mind has the *Idea* of such a *boundless Space actually existing*, since our *Ideas* are not always Proofs of the Existence of Things; but yet since this comes here in our way, I suppose I may say, that we are apt to think, that Space in it self is actually boundless, to which Imagination, the *Idea* of Space or Expansion of its self naturally leads us. For it being considered by us, either as the Extension of Body, or as existing by it self, without any solid Matter taking it up, (for of such a void Space, we have not only the *Idea*, but I have proved, as I think, from the Motion of Body, its necessary existence,) it is impossible the Mind should be ever able to find or suppose any end of it, or be stopp'd any where, in its progress in this Space, how far soever it extends its Thoughts. Any Bounds made with Body, even Adamantine Walls, are so far from putting a stop to the Mind in its farther progress in Space and Extension, that it rather facilitates and enlarges it: For so far as that Body reaches, so far no one can doubt of Extension; and when we are come to the utmost extremity of Body, what is there that can there put a stop and satisfy the Mind, that it is at the end of Space, when it perceives it is not; nay, when it is satisfied that Body it self can move into it? For if it be necessary for the motion of Body, that there should be an empty Space, though never so little here amongst Bodies, and it be possible for Body to move in or through that empty Space; nay, it is impossible for any particle of Matter to move but into an empty Space, the same possibility of a Bodies moving into a void Space, beyond the utmost Bounds of Body, as well as into a void Space interspersed amongst Bodies, will always remain clear and evident, the *Idea* of empty pure Space, whether within or beyond the confines of all Bodies, being exactly the same, differing not in Nature, though in Bulk; and there being nothing to hinder Body from moving into it: So that wherever the Mind places it self by any thought, either amongst or remote from all Bodies, it can in this uniform *Idea* of Space no-where find any bounds, any end; and so must necessarily conclude it by the very Nature and *Idea* of each part of it to be actually infinite.

§. 5. As by the power we find in our selves of repeating, as often as we will, any *Idea* of Space, we get the *Idea* of Immensity; so by being able to repeat the *Idea* of any length of Duration we have in our Minds, with all the endless addition of Number, we come by the *Idea* of *Eternity*. For we find in our selves we can no more come to an end of such repeated *Ideas*, than we can come to the end of Number, which every one perceives he cannot. But here again 'tis another question, quite different from our having an *Idea* of Eternity, to know whether there were any *real Being*, whose Duration has been *eternal*. He that considers something now existing, must necessarily come to something eternal, but having spoke of this in another place, I shall say here no more of it, but proceed on to some other Considerations of our *Idea* of Infinity.

§. 6. If it be so, that our *Idea* of Infinity be got from the Power we observe in our selves, of repeating without end our own *Ideas*; It may be demanded, *Why we do not attribute Infinity to other Ideas, as well as those of Space and Duration*; since they may be as easily, and as often repeated in our Minds as the other; and yet no body ever thinks of infinite sweetness, or infinite whiteness, though he can repeat the *Idea* of Sweet or White, as frequently as those of a Yard, or a Day? To which

I answer, All the *Ideas* that are considered as having parts, and are capable of increase by the addition of any equal or less parts, afford us by their repetition the *Idea* of Infinity; because with this endless repetition, there is continued an enlargement, of which there can be no end. But in other *Ideas* it is not so; for to the largest *Idea* of Extension or Duration that I at present have, the addition of any the least part makes an increase; but to the perfectest *Idea* I have of the whitest Whiteness, if I add another of a less or equal whiteness, (and of a whiter than I have, I cannot add the *Idea*,) it makes no increase, and enlarges not my *Idea* at all; and therefore the different *Ideas* of Whiteness, &c. are called Degrees. For those *Ideas* that consist of Parts, are capable of being augmented by every addition of the least part; but if you take the *Idea* of White, which one parcel of Snow yielded yesterday to our Sight, and another *Idea* of White from another parcel of Snow you see to day, and put them together in your Mind, they embody, as it were, and run into one, and the *Idea* of Whiteness is not at all increased; and if we add a less degree of Whiteness to a greater, we are so far from increasing, that we diminish it. Those *Ideas* that consist not of Parts, cannot be augmented to what proportion Men please, or be stretched beyond what they have received by their Senses; but Space, Duration, and Number, being capable of increase by repetition, leave in the Mind an *Idea* of an endless room for more; nor can we conceive any where a stop to a farther Addition or Progression, and so those *Ideas* alone lead our Minds towards the Thought of Infinity.

§.7. Though our *Idea* of Infinity arise from the contemplation of Quantity, and the endless increase the Mind is able to make in Quantity, by the repeated additions of what Portions thereof it pleases; yet I guess we cause great confusion in our Thoughts, when we join Infinity to any supposed *Idea* of Quantity the Mind can be thought to have, and so discourse or reason about an infinite quantity as an infinite Space, or an infinite Duration: For our *Idea* of Infinity being, as I think, an *endless growing Idea*, but the *Idea* of any Quantity the Mind has, being at that time terminated in that *Idea*, (for be it as great as it will, it can be no greater than it is,) to join Infinity to it, is to adjust a standing measure to a growing bulk; and therefore I think it is not an insignificant subtilty if I say, that we are carefully to distinguish between the *Idea* of the Infinity of Space, and the *Idea* of a Space infinite: The first is nothing but a supposed endless Progression of the Mind, over what repeated *Ideas* of Space it pleases; but to have actually in the Mind the *Idea* of a Space infinite, is to suppose the Mind already passed over, and actually to have a view of all those repeated *Ideas* of Space, which an endless repetition can never totally represent to it, which carries in it a plain contradiction.

§.8. This, perhaps, will be a little plainer, if we consider it in Numbers. The infinity of Numbers, to the end of whose addition every one perceives there is no approach, easily appears to any one that reflects on it: But how clear soever this *Idea* of the Infinity of Number be, there is nothing yet more evident than the absurdity of the actual *Idea* of an Infinite Number, whatsoever positive *Ideas* we have in our Minds of any Space, Duration, or Number, let them be never so great, they are still finite; but when we suppose an inexhaustible remainder, from which we remove all bounds, and wherein we allow the Mind an endless progression of Thought, without ever completing the *Idea*, there we have our *Idea* of Infinity; which though it seem to be pretty clear, when we consider nothing else in it, but the Negation of an end, yet when we would frame

frame in our Minds the *Idea* of an infinite Space or Duration, that *Idea* is very obscure, and confused, because it is made up of two Parts, very different, if not inconsistent. For let a Man frame in his Mind an *Idea* of any Space or Number, as great as he will; 'tis plain, the Mind rests and terminates in that *Idea*, which is contrary to the *Idea of Infinity*, which consists in a supposed endless Progression. And therefore, I think, it is, that we are so easily confounded, when we come to argue, and reason about infinite Space or Duration, &c. Because the parts of such an *Idea*, not being perceived to be, as they are, inconsistent, the one side or other always perplexes, whatever Consequences we draw from the other, as an *Idea* of Motion not passing on, would perplex any one, who should argue from such an *Idea*, which is not better than an *Idea* of motion at rest; and such another seems to me to be the *Idea* of a Space, or (which is the same thing) a Number infinite, i. e. of a Space or Number, which the Mind actually has, and so views, and terminates in; and of a Space or Number, which in a constant and endless Progression, and enlarging it, can in Thought never attain to. For how large soever an *Idea* of Space I have in my Mind, it is no larger than it is that instant that I have it, though I be capable the next instant to double it; and so on *in infinitum*: For that alone is infinite, which has no Bounds, and that the *Idea* of Infinity; in which our Thoughts can find none.

§. 9. But of all other *Ideas*, it is *Number*, as I have said, which, I think, furnishes us with the clearest and most distinct *Idea of Infinity* we are capable of. For even in Space and Duration, when the Mind pursues the *Idea* of Infinity, it there makes uses of the *Ideas* and Repetitions of Numbers, as of millions of millions of Miles, or Years, which are as so many distinct *Ideas*, kept best by Number from running into a confused heap, wherein the Mind loses it self; and when it has added together as many millions, &c. as it pleases, of known lengths of Space or Duration, the clearest *Idea* it can get of Infinity, is the confused incomprehensible remainder of endless addible Numbers, which affords no prospect of Stop or Boundary.

§. 10. It will, perhaps, give us a little farther light into the *Idea* we have of *Infinity*, and discover to us, that it is nothing but the *Infinity of Number applied to determinate parts*, of which we have in our Minds the distinct *Ideas*, if we consider that Number is not generally thought by us infinite, whereas Duration and Extension is apt to be so; which arises from hence, That in Number we are at one end, as it were: for there being in Number nothing less than an Unite, we there stop, and are at an end; but in addition, or increase of Number, we can set no Bounds: and so it is like a Line, whereof one end terminating with us, the other is extended still forwards beyond all that we can conceive; but in Space and Duration it is otherwise. For in Duration, we consider it, as if this Line of Number were extended both ways to an unconceivable, undeterminate, and infinite length; which is evident to any one, that will but reflect on what Consideration he hath of Eternity; which, I suppose, he will find to be nothing else, but the turning this Infinity of Number both ways, *à parte ante*, and *à parte post*, as they speak. For when we would consider Eternity, *à parte ante*, what do we but beginning from our selves, and the present time we are in, we repeat in our Minds the *Ideas* of Years or Ages, or any other assignable Portion of Duration past, with a prospect of proceeding in such Addition, with all the Infinity of Number; and when we would consider Eternity, *à parte post*, we just after the same rate begin from our selves, and reckon by multiplied Periods yet to come

come still, extending that Line of Number, as before; and these two being put together, are that infinite Duration we call *Eternity*; which every way we consider, appears infinite, because we still turn that way the infinite end of Number, *i.e.* the Power still of adding more.

§. 11. The same happens also in Space, wherein conceiving our selves to be as it were in the Centre, we do on all sides pursue those indeterminable Lines of Number; and reckoning any way from our selves, a Yard, Mile, Diameter of the Earth, or *Orbis magnus*, by the infinity of Number, we add others to them as often as we will; and having no more Reason to set Bounds to those repeated *Ideas*, than we have to set Bounds to Number, we have that indeterminable *Idea of Immensity*.

§. 12. And since in any bulk of Matter, our Thoughts can never arrive at the utmost *Divisibility*, therefore there is an apparent Infinity to us also in that, which has the Infinity also of Number, but with this difference, That in the former Considerations of the Infinity of Space and Duration, we only use Addition of Numbers; whereas this is like the division of an Unite into its Fractions, wherein the Mind also can proceed *in infinitum*, as well as in the former Additions, it being indeed but the Addition still of new Numbers: though in the Addition of the one, we can have no more the positive *Idea* of a Space infinitely great, than in the Division of the other, we can have the *Idea* of a Body infinitely little; our *Idea* of Infinity being, as I may so say, a growing and fugitive *Idea*, still in a boundless Progression that can step no where.

§. 13. Though it be hard, I think, to find any one so absurd, as to say he has the positive *Idea* of an actual infinite Number; the Infinity whereof lies only in a Power still of adding any Combination of Unites to any former Number, and that as long, and as much as one will; the like also being in the Infinity of Space and Duration, which Power leaves always to the Mind room for endless Additions; yet there be those, who imagine they have positive *Ideas of infinite* Duration and Space. It would, I think, be enough to destroy any such positive *Idea* of infinite, to ask him that has it, whether he could add to it or no; which would easily shew the mistake of such a positive *Idea*. We can, I think, have no positive *Idea* of any Space or Duration, which is not made up of, and commensurate to repeated Numbers of Feet or Yards, or Days and Years, which are the common measures whereof we have the *Ideas* in our Minds, and whereby we judge of the greatness of these sort of quantities. And therefore, since an *Idea* of infinite Space or Duration must needs be made up of infinite Parts, it can have no other Infinity, than that of Number capable still of farther Addition; but not an actual positive *Idea* of a Number infinite. For, I think, it is evident, that the Addition of finite things together (as are all lengths, whereof we have the positive *Ideas*) can never otherwise produce the *Idea* of infinite, than as Number does; which consisting of Additions of finite Unites one to another, suggests the *Idea* of Infinite, only by a Power we find we have, of still increasing the Sum, and adding more of the same kind, without coming one jot nearer the end of such Progression.

§. 14. They who would prove their *Idea of Infinite to be positive*, seem to me to do it by a pleasant Argument, taken from the Negation of an end; which being negative, the Negation of it is positive. He that considers that the end is in Body, but the extremity or superficies of that Body will not, perhaps, be forward to grant, that the end is a bare negative: And he that perceives the end of his Pen is black or white, will be apt to think, that the end is something more than a pure Negation;

nor is it, when applied to Duration, the bare Negation of Existence, but more properly the last moment of it. But if they will have the end to be nothing but the bare Negation of Existence, I am sure they cannot deny, but that the beginning is the first instant of Being, and is not by any Body conceived to be a bare Negation; and therefore by their own Argument, the *Idea* of Eternal, *à parte ante*, or of a Duration without a beginning, is but a negative *Idea*.

§. 15. The *Idea* of Infinite, has, I confess, something of positive in all those things we apply to it. When we would think of infinite Space or Duration, we at first step usually make some very large *Idea*, as, perhaps, of Millions of Ages, or Miles, which possibly we double and multiply several times. All that we thus amass together in our Thoughts, is positive, and the assemblage of a great number of positive *Ideas* of Space or Duration: But what still remains beyond this, we have no more a positive distinct notion of, than a Mariner has of the depth of the Sea; where having let down a large portion of his Sounding-line, he reaches no bottom, whereby he knows the depth to be so many fathoms, and more; but how much that more is, he hath no distinct notion at all: And could he always supply new Line, and find the Plummet always sink without ever stopping, he would be something in the posture of the Mind reaching after a compleat and positive *Idea* of Infinity; in which case, let this Line be 10, or 10000 fathoms long, it equally discovers what is beyond it, and gives only this confused and comparative *Idea*, That this is not all, but one may yet go farther. So much as the Mind comprehends of any Space, it has a positive *Idea* of; but in this thought of Infinity, it being always enlarging, always advancing, the *Idea* is still imperfect and incomplete. So much Space as the Mind takes a view of, in its contemplation of Greatness, is a clear Picture, and positive in the Understanding; but Infinite is still greater. 1. Then the *Idea* of so much is positive and clear. 2. The *Idea* of Greater is also clear, but it is but a comparative *Idea*. 3. The *Idea* of so much greater, as cannot be comprehended, and this is plain Negative: Not Positive; for he has no positive clear *Idea* of the largeness of any Extension, (which is that sought for in the *Idea* of Infinite,) that has not a comprehensive *Idea* of the Dimensions of it; and such, no body, I think, pretends to, in what is infinite. For to say a Man has a positive clear *Idea* of any Quantity, without knowing how great it is, is as reasonable as to say, He has the positive clear *Idea* of the number of the Sands on the Sea-shoar, who knows not how many they be; but only that they are more than Twenty: For just such a perfect and positive *Idea* has he of Infinity, when he applies it to Space or Duration, who says it is larger than the Extent or Duration of 10, 100, 1000, or any other number of Miles, or Years, whereof he has, or can have, a positive *Idea*; which is all the *Idea*, I think, we have of Infinite. So that what lies beyond our positive *Idea* towards Infinity, lies in Obscurity, and has the indeterminate confusion of a Negative *Idea*, wherein I know, I neither do nor can comprehend all I would, it being too large for a finite and narrow Capacity: And that cannot but be very far from a positive compleat *Idea*, wherein the greatest part of what I would comprehend, is left out, under the indeterminate intimation of being still greater. For to say, that having in any quantity measured so much, or gone so far, you are not yet at the end, is only to say, that that Quantity is greater, so that the Negation of an end in any Quantity, is in other words only to say, That it is bigger; and a total negation of an end, is but the carrying this Bigger still with you, in all the Progressions your Thoughts shall make in Quantity; and adding this

this *Idea* of still greater, to all the *Ideas* you have, or can be supposed to have of Quantity; and whether such an *Idea* as that, be positive, I leave any one to consider.

§. 16. I ask those who say they have a *positive Idea of Eternity*, whether their *Idea* of Duration includes in it Succession, or not? If it do not, they ought to shew the difference of their Notion of Duration, when applied to an eternal Being, and to a finite; since, perhaps, there may be others, as well as I, who will own to them their Weakness of Understanding in this point, and acknowledge, That the Notions they have of Duration, force them to conceive, That whatever has Duration, is of a longer continuance to day, than it was yesterday. If to avoid Succession in eternal Existence, they recur to the *Punctum Stans* of the Schools, I suppose they will thereby very little mend the matter, or help us to a more clear and positive *Idea* of infinite Duration, there being nothing more inconceivable to me, than Duration without Succession. Besides, that *Punctum Stans*, if it signifie any thing, being not *Quantum*, finite or infinite, cannot belong to it. But if our weak Apprehensions cannot separate Succession from any Duration whatsoever, our *Idea* of Eternity can be nothing but of infinite Succession of Moments of Duration, wherein any thing does exist; and whether any one has, or can have, a positive *Idea* of an actual infinite Number, I leave him to consider, till his infinite Number be so great, that he himself can add no more to it; and as long as he can increase it, I doubt he himself will think the *Idea* he hath of it, a little too scanty for positive Infinity.

§. 17. I think it unavoidable for every considering rational Creature, that will but examine his own, or any other Existence, to have the Notion of an eternal wise Being, who had no beginning: And such an *Idea* of infinite Duration, I am sure I have; but this *Negation of a Beginning*, being but the Negation of a positive thing, scarce gives me a *positive Idea of Infinity*; which whenever I endeavour to extend my Thoughts to, I confess my self at a loss, and find I cannot attain any clear comprehension of it.

§. 18. He that thinks he has a positive *Idea* of infinite Space, will, when he considers it, find that he can no more have a *positive Idea* of the greatest, than he has of the least Space: For in this latter, which seems the easier of the two, and more within our comprehension, we are capable only of a comparative *Idea* of Smallness, which will always be less than any one whereof we have the positive *Idea*; for all our positive *Ideas* of any Quantity, whether great or little, have always bounds, though our comparative *Idea*, whereby we can always add to the one, and take from the other, hath no bounds: For that which remains either great or little, not being comprehended in that positive *Idea* we have, lies in obscurity; and we have no other *Idea* of it, but of the power of enlarging the one, and diminishing the other without ceasing. For a Pestle and Mortar will as soon bring any Particle of Matter to Indivisibility, as the acute Thought of a Mathematician: And a Surveyor may as soon with his Chain, measure out infinite Space, as a Philosopher by the quickest flight of Mind reach it, or by thinking comprehend it, which is to have a positive *Idea* of it. He that thinks on a Cube of an Inch diametre, has a clear and positive *Idea* of it in his Mind, and so can frame one of $\frac{1}{2}$ a $\frac{1}{4}$, and so on till he has the *Idea* in his Thoughts of something very very little, but yet reaches not the *Idea* of that incomprehensible littleness, which Division can produce. What remains of Smallness, is as far from his Thoughts, as when he first began;

and therefore he never comes at all to have a clear and positive *Idea* of that Smallness, which is consequent to infinite Divisibility.

§. 19. Every one that looks towards Infinity, does, as I have said, at first glance make some very large *Idea* of that he applies it to, let it be Space, or Duration; and possibly wearies his Thoughts, by multiplying in his Mind that first large *Idea*: But yet by that he comes no nearer, having a *positive clear Idea* of what remains, to make up a positive Infinite, than the Country-fellow had of the Water which was yet to come, and pass the Channel of the River where he stood:

*Rusticus expectat dum transeat amnis, at ille
Labitur, & Labetur per omne volubilis ævum.*

§. 20. There are some I have met with, that put so much difference between infinite Duration, and infinite Space, that they persuade themselves, that they have a *positive Idea of Eternity*; but that they *have not*, nor can have any *Idea of infinite Space*. The reason of which mistake, I suppose to be this, That finding by a due Contemplation of Causes and Effects, that it is necessary to admit some Eternal Being, and so to consider the real existence of that Being, as taking up, and commensurate to their *Idea* of Eternity. But on the other side, not finding it necessary, but on the contrary apparently absurd, that Body should be infinite, they forwardly conclude they can have no *Idea* of infinite Space, because they can have no *Idea* of infinite Matter: Which Consequence, I conceive, is very ill collected, the Existence of Matter being no ways necessary to the Existence of Space, no more than the Existence of Motion, or the Sun, is necessary to Duration, though Duration uses to be measured by it: And I doubt not but a Man may have the *Idea* of 10000 Miles square, without any Body so big, as well as the *Idea* of 10000 Years, without any Body so old. It seems as easie to me to have the *Idea* of Space empty of Body, as to think of the Capacity of his Bushel without Corn, or the hollow of a Nut-shell without a Kernel in it; it being no more necessary that there should be existing a solid Body infinitely extended, because we have any *Idea* of the Infinity of Space, than it is necessary that the World should be eternal, because we have an *Idea* of infinite Duration: And why should we think our *Idea* of infinite Space, requires the real existence of Matter to support it, when we find we have as clear an *Idea* of infinite Duration to come, as we have of infinite Duration past? Though, I suppose, no body thinks it conceivable, that any thing does or has existed in that future Duration. Nor is it possible to join our *Idea* of future Duration, with present or past Existence, any more than it is possible to make the *Ideas* of yesterday, to day, and to morrow to be the same; or bring Ages past and future together, and make them contemporary. But if these men are of the Mind, That they have clearer *Ideas* of infinite Duration, than of infinite Space, because it is past doubt, that GOD has existed from all Eternity, but there is no real Matter co-extended with infinite Space; yet those Philosophers who are of Opinion, That infinite Space is possessed by GOD's infinite Omnipresence, as well as infinite Duration by his eternal Existence, must be allowed to have as clear *Idea* of infinite Space, as of infinite Duration; though neither of them, I think, has any *positive Idea of Infinity* in either case. For whatsoever positive *Ideas* a Man has in his Mind of any Quantity, he can repeat it, and add it to the former, as easie as he can add together the *Ideas* of two Days, or two Paces, which are positive *Ideas* of Lengths he has in his Mind, and so on as long as he please;

please; whereby if a Man had a positive *Idea* of Infinite, either Duration or Space, he could add two Infinites together; nay, make one Infinite infinitely bigger than another, Absurdities too gross to be confuted.

§. 21. But yet if after all this, there be Men who persuade themselves, that they have clear positive comprehensive *Ideas* of Infinity, 'tis fit they enjoy their privilege: And I should be very glad (with some others that I know, who acknowledge they have none such,) to be better informed by their Communication; for I have been hitherto apt to think, that the great and *inextricable Difficulties*, which perpetually involve all Discourses concerning *Infinity*, whether of Space, Duration, or Divisibility, have been the certain marks of a defect in our *Ideas of Infinity*, and the disproportion the Nature thereof has to the Comprehension of our narrow Capacities. For whilst Men talk and dispute of infinite Space or Duration, as if they had as compleat and positive *Ideas* of it, as they have of the Name they use for it, or of a Yard, or of an Hour, or any other determinate Quantity, it is no wonder if the incomprehensible Nature of the thing they discourse of, or reason about, lead them into Perplexities and Contradictions, and their Minds be overlaid by an Object too large and mighty, to be surveyed and managed by them.

§. 22. If I have dwelt pretty long on the Considerations of Duration, Space, and Number; and what arises from the Contemplation of them, Infinity, 'tis possibly no more than the matter requires, there being few simple *Ideas*, whose Modes give more exercise to the Thoughts of Men, than these do. I pretend not to treat of them in their full Latitude, it suffices to my Design, to shew how the Mind receives them, such as they are, from *Sensation* and *Reflection*: And how even the *Idea* we have of *Infinity*, how remote soever it may seem to be from any Object of Sense, or Operation of our Mind, has nevertheless, as all our other *Ideas*, its Original there. Some Mathematicians, perhaps, of advanced Speculations, may have other ways to introduce into their Minds *Ideas* of Infinity: But this hinders not but that they themselves, as well as all other Men, got the first *Ideas* they had of Infinity, from *Sensation* and *Reflection*, in the method we have here set down.

C H A P. XVIII.

Of other simple Modes.

§. 1. **T**Hough I have in the foregoing Chapters, shewn how from simple *Ideas* taken in by *Sensation*, the Mind comes to extend its self even to Infinity; which however it may of all others seem most remote from any sensible Perception, yet at last hath nothing in it, but what is made out of simple *Ideas*, received into the Mind by the Senses, and afterwards there put together, by the Faculty the Mind has to repeat its own *Ideas*. Though, I say, these might be instances of enough simple Modes of the simple *Ideas* of *Sensation*, and suffice to shew, how the Mind comes by them; yet I shall for Methods sake, though briefly, give an account of some few more, and then proceed to more complex *Ideas*.

§. 2. To slide, roll, tumble, walk, creep, run, dance, leap, skip, and abundance other that might be named, are Words which are no sooner heard, but every one who understands English, has presently in his Mind distinct

distinct *Ideas*, which are all but the different modifications of Motion. *Modes of Motion* answer those of Extension; Swift and Slow are two different *Ideas* of Motion, the measures whereof are made of the distances of Time and Space put together, so they are complex *Ideas* comprehending Time and Space with Motion.

§. 3. The like variety have we in Sounds. Every articulate word is a different *modification of Sound*; by which we see, that from the sense of Hearing by such modifications, the Mind may be furnished with distinct *Ideas*, to almost an infinite Number. Sounds also, besides the distinct cries of Birds and Beasts, are modified by diversity of Notes of different length put together, which make that complex *Idea* call'd a Tune, which a Musician may have in his Mind, when he hears or makes no Sound at all, by reflecting on the *Ideas* of those Sounds, so put together silently in his own Fancy.

§. 4. Those of Colours might also be very various; some we take notice of as the different degrees, or as they are termed, *Shades of the same Colour*: But since we very seldom make assemblages of Colours, either for Use or Delight, but Figure is taken in also, and has its part in it, as in Painting, Weaving, Needle-works, &c. Those which are taken notice of, do most commonly belong to mixed Modes, as being made up of *Ideas* of divers kinds, viz. Figure and Colour, such as Beauty, Rain bow, &c.

§. 5. All *compoundd Tastes and Smells*, are also Modes made up of these simple *Ideas* of those Senses; but they being such as generally we have no names for, are less taken notice of, and cannot be set down in writing; and therefore must be left without enumeration, to the Thoughts and Experience of my Reader.

§. 6. In general it may be observed, that those *simple Modes* which are considered but as different degrees of the same simple *Idea*; though they are in themselves many of them very distinct *Ideas*; yet have ordinarily no distinct Names, nor are much taken notice of as distinct *Ideas*, where the difference is but very small between them. Whether Men have neglected these Modes, and given no Names to them, as wanting measures nicely to distinguish them, or because when they were so distinguished, that Knowledge would not be of general or necessary use, I leave it to the Thoughts of others; it is sufficient to my purpose to shew, that all these simple *Ideas*, come to our Minds only by Sensation and Reflection; and that when the Mind has them, it can variously repeat and compound them, and so make new complex *Ideas*. But though White, Red, or Sweet, &c. have not been modified or made into complex *Ideas*, by several Combinations, so as to be named, and thereby ranked into Species; yet some others of the simple *Ideas*, viz. those of Unity, Duration, Motion, &c. above instanced in, as also Power and Thinking have been thus modified to a great variety of complex *Ideas*, with Names belonging to them.

§. 7. *The Reason whereof*, I suppose, has been this, That the great Concernment of Men being with Men one amongst another, the Knowledge of Men, and their Actions, and the signifying of them to one another, was most necessary; and therefore they made *Ideas* of Actions very nicely modified, and gave those complex *Ideas* names, that they might the more easily record and discourse of those things they were daily conversant in, without long Ambages and Circumlocutions; and that the things they were continually to give and receive information about, might be the easier and quicker understood. That this is so and that Men in framing different complex *Ideas*, and giving them Names, have been much governed

verned by the end of Speech in general (which is a very short and expedite way of conveying their Thoughts one to another) is evident in the Names, which in several Arts have been found out, and applied to several complex *Ideas* of modified Actions, belonging to their several Trades, for dispatch sake, in their Direction or Discourses about them: Which *Ideas* are not generally framed in the Minds of Men not conversant about these Operations; and thence the words that stand for them, by the greatest part of Men of the same Language, are not understood; v.g. *Colifter*, *Drilling*, *Filtration*, *Cobobation*, are words standing for certain complex *Ideas*; which being not in the Minds of every body, they having no use of them, those names of them are not generally understood but by Smiths, and Chimists; who having framed the complex *Ideas* which these words stand for, and having given names to them, or received them from others upon hearing of these names in communication, readily conceive those *Ideas* in their Minds; as by Cohobation all the simple *Ideas* of Distilling, and the pouring the Liquor, distilled from any thing, back upon the remaining Matter, and distilling it again. Thus we see, that there are great varieties of simple *Ideas*, as of Tastes and Smells, which have no Names, and of Modes many more; which either not having been generally enough observed, or else not being of any great use to be taken notice of in the Affairs and Converse of Men, they have not had names given to them, and so pass not for Species, which we shall have occasion hereafter to consider more at large, when we come to speak of Words.

C H A P. XIX.

Of the Modes of Thinking.

§. I. **W**hen the Mind turns its view inwards upon its self, and contemplates its own Actions, *Thinking* is the first that occurs; wherein it observes a great variety of Modifications, and thereof frames to it self distinct *Ideas*. Thus the Perception, or Thought, which actually accompany, and is annexed to any impression on the Body, made by an external Object, it frames a distinct *Idea* of, which we call *Sensation*; which is, as it were, the actual entrance of any *Idea* into the Understanding by the Senses. The same *Idea*, when it again recurs without the operation of the like Object on the eternal Sensory, is *Remembrance*. If it be sought after by the Mind, and with pain and endeavour found, and brought again in view, 'tis *Recollection*: If it be held there long under attentive Consideration, 'tis *Contemplation*. When *Ideas* float in our Mind, without any reflection or regard of the Understanding, it is that which the *French* call *Resvery*; our Language has scarce a name for it. When the *Ideas* that offer themselves, (for as I have observed in another place, whilst we are awake, there will always be a train of *Ideas* succeeding one another in our Minds,) are taken notice of, and, as it were, registred in the Memory, it is *Attention*. When the Mind with great earnestness, and of a choice, fixes its view on any *Idea*, considers it on all sides, and will not be called off by the ordinary sollicitation of other *Ideas*, it is that we call *Intention*, or *Study*. Sleep, without dreaming, is rest from all these; and *Dreaming* it self, is the perception of *Ideas* (whilst the outward Senses are stopp'd, so that they receive not outward Objects with

with their usual quickness,) in the Mind, not suggested by any external Objects, or known occasion; nor under any Choice or Conduct of the Understanding at all; and whether that which we call *Extasie*, be not dreaming with the Eyes open, I leave to be examined.

§. 2. There are some few instances of those various *Modes of thinking*, which the Mind may observe in it self, and so frame as distinct *Ideas* of, as it does of White and Red, a Square or a Circle. I do not pretend to enumerate them all, nor to treat at large of this set of *Ideas*, which are got from Reflection, that would be to make a Volume. It suffices to my present purpose, to have shewn here, by some few Examples, of what sort those *Ideas* are, and how the Mind comes by them; especially since I shall have occasion hereafter to treat more at large of *Reasoning*, *Judging*, *Volition*, and *Knowledge*, which are some of the most considerable Operations of the Mind, and Modes of thinking.

§. 3. But, perhaps, it may not be an unpardonable Digression, nor wholly impertinent to our present Design, if we reflect here upon *the different State of the Mind in thinking*; which those instances of Attention, *Revery*, and Dreaming, &c. before mentioned naturally enough suggest. That there are *Ideas*, some or other, always present in the Mind of a waking Man, every ones Experience convinces him; though the Mind employs it self about them with several degrees of Attention. Sometimes the Mind fixes it self with so much earnestness on the Contemplation of some Objects, that it turns their *Ideas* on all sides; remarks their Relations and Circumstances; and views every part so nicely, and with such intention, that it shuts out all other Thoughts, and takes no notice of the ordinary Impressions made then on the Senses, which at another Season would produce very sensible Perceptions: At other times, it barely observes the train of *Ideas* that succeed in the Understanding, without directing and pursuing any of them: And at other times, it lets them pass almost quite unregarded, as faint shadows that make no Impression.

§. 4. This difference of Intention, and Remission of the Mind in thinking, with a great variety of Degrees, between earnest Study, and very near minding nothing at all, Every one, I think, has experimented in himself. Trace it a little farther, and you find the Mind in Sleep, retired as it were from the Senses, and out of the reach of those Motions made on the Organs of Sense, which at other times produce very vivid and sensible *Ideas*. I need not, for this instance in those, who sleep out whole stormy Nights, without hearing the Thunder, or seeing the Lightning, or feeling the shaking of the House, which are sensible enough to those who are waking. But in this retirement of the Mind from the Senses, it often retains a yet more loose and incoherent manner of thinking, which we call *Dreaming*, and last of all sound Sleep closes the Scene quite, and puts an end to all Appearances. This I think almost every one has Experience of in himself, and his own Observation without difficulty leads him thus far. That which I would farther conclude from hence is, That since the Mind can sensibly put on, at several times, several degrees of Thinking; and be sometimes even in a waking Man so remiss, as to have Thoughts dim and obscure to that degree, that they are very little removed from none at all; and at last in the dark retirements of sound Sleep, loses the sight perfectly of all *Ideas* whatsoever: Since, I say, this is evidently so in Matter of Fact, and constant Experience, I ask whether it be not probable, that *thinking is the Action, and not the Essence of the Soul*? Since the Operations of Agents will easily admit of intention and remission; but the Essences of things, are not conceived capable of any such variation. But this by the bye.

C H A P. XX.

Of Modes of Pleasure and Pain.

§. 1. **A**mongst the simple *Ideas*, which we receive both from Sensation and Reflection, *Pain and Pleasure* are two very considerable ones. For as in the Body, there is Sensation barely in its self, or accompanied with Pain or Pleasure : so the Thought, or Perception of the Mind is simply so, or else accompanied also with Pleasure or Pain, Delight or Trouble, call it how you please. These like other simple *Ideas* cannot be described, nor their Names defined ; the way of knowing them is, as of the simple *Ideas* of the Senses, only by Experience : For to define them by the Presence of Good or Evil, is no otherwise to make them known to us, than by making us reflect on what we feel in our selves, upon the several and various Operations of Good and Evil upon our Minds, as they are differently applied to, or considered by us.

2. Things then are good or evil, only in reference to Pleasure or Pain ; That we call *Good*, which is apt to cause or increase Pleasure, or diminish Pain in us ; or else to procure, or preserve us the possession of any other Good, or absence of any Evil. And on the contrary we name that *Evil*, which is apt to produce or increase any Pain, or diminish any Pleasure in us ; or else to procure us any Evil, or deprive us of any Good. By Pleasure and Pain, I must be understood to mean of Body or Mind, as they are commonly distinguished ; though in truth, they be only different Constitutions of the Mind, sometimes occasioned by disorder in the Body, sometimes by Thoughts of the Mind.

§. 3. Pleasure and Pain, and that which causes them, Good and Evil, are the hinges on which our *Passions* turn : and if we reflect on our selves, how these under various Considerations operate in us, what Modifications or Tempers of Mind, what internal Sensations, (if I may so call them,) they produce in us, we may thence form to our selves the *Ideas* of our Passions.

§. 4. Thus any one reflecting upon the Thought he has of the Delight, which any present or absent thing is apt to produce in him, has the *Idea* we call *Love*. For when a Man declares in *Autumn*, when he is eating them ; or in *Spring*, when there are none, that he loves Grapes, it is no more, but that the taste of Grapes delights him ; let an alteration of Health or Constitution destroy the delight of their Taste, and he then can be said to love Grapes no longer.

§. 5. On the contrary, the Thought of the Pain which any thing present or absent is apt to produce in us, is what we call *Hatred*. Were it my business here to enquire any farther, than into the bare *Ideas* of our Passions, as they depend on different Modifications of Pleasure and Pain, I should remark that our Love and Hatred of inanimate insensible Beings, is commonly founded on that Pleasure and Pain we receive from their use and application any way to our Senses, though with their Destruction ; but Love and Hatred to Beings capable of Happiness or Misery, is often the Pain or Delight we have in their very Being or Happiness. Thus the Being and Welfare of a Man's Children or Friends, producing constant Delight in him, he is said constantly to love them. But it suffices to note that our *Ideas* of Love and Hatred, are but the Dispositions of the Mind, in respect of Pleasure and Pain in general however caused in us.

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§. 6. The

§. 6. The uneasiness a Man finds in himself upon the absence of any thing, whose present enjoyment carries the *Idea* of Delight with it, is that we call *Desire*, which is greater or less, as that uneasiness is more or less vehement.

§. 7. *Joy* is a delight of the Mind, from the consideration of the present or assured approaching possession of a Good; and we are then possessed of any Good, when we have it so in our power, that we can use it when we please. Thus a Man almost starved, has *Joy* at the arrival of Relief, even before he has the pleasure of using it; and a Father, in whom the very well-being of his Children causes delight, is always, as long as his Children are in such an estate, in the possession of that Good; for he needs but to reflect on it to have that pleasure.

§. 8. *Sorrow* is uneasiness in the Mind, upon the thought of a Good lost, which might have been enjoy'd longer, or the sense of a present Evil.

§. 9. *Hope* is that pleasure in the Mind, which every one finds in himself, upon the thought of a probable future enjoyment of a thing which is apt to delight him.

§. 10. *Fear* is an uneasiness of the Mind, upon the thought of future Evil likely to befall us.

§. 11. *Despair* is the thought of the unattainableness of any Good, which works differently in Mens Minds, sometimes producing uneasiness or pain, sometimes rest and indolency.

§. 12. *Anger*, is uneasiness or discomposure of the Mind, upon the receipt of any Injury, with a present purpose of Revenge.

§. 13. *Envy* is an uneasiness of Mind, caused by the consideration of a Good we desire, obtained by one we think should not have had it before us.

§. 14. These two last, *Envy* and *Anger*, not being caused by Pain and Pleasure simply in themselves, but having in them some mixed Considerations of our selves and others, are not therefore to be found in all Men, because those other parts of valuing their Merits, or intending Revenge, is wanting in them; but all the rest terminating purely in Pain and Pleasure, are, I think, to be found in all Men: For we love, desire, rejoice, and hope only in respect of Pleasure; we hate and fear, and are sad only in respect of Pain ultimately; and these Passions are moved by things only, as they appear to be the Causes of Pleasure and Pain, and to have Pleasure or Pain some way or other annexed to them. Thus we extend our Hatred usually to the subject, (at least if a sensible or voluntary Agent,) which has produced Pain in us, because the fear it leaves is a constant pain: But we do not so constantly love what has done us good; because Pleasure operates not so strongly on us, as Pain; and because we are not so ready to have hope it will do so again; but this by the bye.

§. 15. By *Pleasure* and *Pain*, Delight and Uneasiness, I must all along be understood, as I have above intimated, to mean not only bodily Pain and Pleasure, but whatsoever Delight or Uneasiness is felt by us, whether arising from any grateful or unacceptable Sensation or Reflection.

§. 16. 'Tis farther to be considered, That in reference to the Passions, the removal or lessening of a Pain is considered, and operates as a Pleasure, and the loss or diminishing of a Pleasure, as a Pain.

§. 17. The Passions too have most of them in most Persons operations on the Body, and cause various changes in it; which not being always sensible, do not make a necessary part of the *Idea* of each Passion: For

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Shame, which is an uneasiness of the Mind, upon the thought of having done something which is indecent, or will lessen the Esteem we value, has not always blushing accompanying it.

§. 18. I would not be mistaken here, as if I meant this as a Discourse of the *Passions*; they are *many more than those* I have here named: And those I have taken notice of, would each of them require a much larger and more accurate Discourse. I have only mentioned these here, as so many instances of Modes of Pleasure and Pain resulting in our Minds, from various Considerations of Good and Evil; I might, perhaps, have instanced in other Modes of Pleasure and Pain more simple than these, as the Pain of Hunger and Thirst, and the Pleasure of Eating and Drinking, when one is so: The pain of the Head-ach, or pleasure of rational Conversation with one's Friend, or discovering of a speculative Truth upon study. But the Passions being of much more concernment to us, I rather made choice to instance in them, and shew how the *Ideas* we have of them, are derived from Sensation and Reflection.

CHAP. XXI.

Of Power.

§. 1. **T**He Mind being every day informed by the Senses, of the alteration of those simple *Ideas* it observes in things without, and taking notice how one comes to an end, and ceases to be, and another begins to exist which was not before; reflecting also on what passes within it self, and observing a constant change of its *Ideas*, sometimes by the impression of outward Objects on the Senses, and sometimes by the determination of its own choice, and concluding from what it has so constantly observed to have been, that the like Changes will for the future be made in the same things, by like Agents, and by the like ways, considers in one thing the possibility of having any of its simple *Ideas* changed, and in another the possibility of making that change; and so comes by that *Idea* which we call *Power*. Thus we say, Fire has a power to melt Gold, *i. e.* to destroy the consistency of its insensible parts, and consequently its hardness, and make it fluid; and Gold has a power to be melted; That the Sun has a power to blanch Wax, and Wax a power to be blanched by the Sun, whereby the Yellowness is destroy'd, and Whiteness made to exist in its room: in which, and the like Cases, the Power we consider is in reference to the change of perceivable *Ideas*. For we cannot observe any alteration to be made in, or operation upon any thing, but by the observable change of its sensible *Ideas*; nor conceive any alteration to be made, but by conceiving a Change of some of its *Ideas*.

§. 2. *Power* thus considered is twofold, *viz.* as able to make, or able to receive any change: The one may be called *Active*, and the other *Passive Power*. Whether matter be not wholly destitute of active Power, as its Author GOD is truly above all passive power; and whether the intermediate state of created Spirits be not that alone which is capable of both active and passive Power, may be worth consideration: I shall not now enter into that enquiry, my present business being not to search into the original of Power, but how we come by the *Idea* of it. But since active Powers make so great a part of our complex *Ideas* of natural

tural Substances, (as we shall see hereafter,) and I mention them as such according to common apprehension; yet they being not, perhaps, so truly active Powers, as our hasty Thoughts are apt to represent them, I judge it not amiss, by this intimation, to direct our Minds to the consideration of GOD and Spirits, for the clearest *Idea* of active Power.

§. 3. I confess *Power includes in it some kind of relation*, (a relation to Action or Change,) as indeed which of our *Ideas*, of what kind soever, when attentively considered, does not? For our *Ideas* of Extension, Duration, and Number, do they not all contain in them a secret relation of the Parts? Figure and Motion have something relative in them much more visibly; and sensible Qualities, as Colours and Smells, &c. what are they but the Powers of different Bodies, in relation to our Perception, &c. And if considered in the things themselves, do they not depend on the Bulk, Figure, Texture, and Motion of the Parts? All which include some kind of relation in them. Our *Idea* therefore of *Power*, I think, may well have a place amongst other simple *Ideas*, and be considered as one of them, being one of those that makes a principle Ingredient in our complex *Ideas* of Substances, as we shall here after have occasion to shew.

§. 4. Of passive Power, all sensible things abundantly furnish us with *Ideas*; whose sensible Qualities and Beings we find to be in a continual flux, and therefore with reason we look on them as liable still to the same Change. Nor have we of *active Power* (which is the more proper signification of the word *Power*) fewer instances: since whatever Change is observed, the Mind must collect a Power somewhere, able to make that Change, as well as a possibility in the thing it self to receive it. But yet if we will consider it attentively, Bodies by our Senses do not afford us so clear and distinct an *Idea* of active Power, as we have from reflection on the Operations of our Minds. For all Power relating to Action, and there being but two sorts of Action whereof we have any *Idea*, viz. Thinking and Motion, let us consider whence we have the clearest *Ideas* of the Powers which produce these Actions. 1. Of Thinking, Body affords us no *Idea* at all, it is only from Reflection that we have that; neither have we from Body any *Idea* of the beginning of Motion. A Body at rest affords us no *Idea* of any active Power to move; and when it is set in motion its self, that Motion is rather a Passion, than an Action in it: For when the Ball obeys the stroke of a Billiard-stick, it is not any action of the Ball, but bare passion; also when by impulse it sets another Ball in motion that lay in its way, it only communicates the Motion it had received from another, and loses in it self so much as the other received; which gives us but a very obscure *Idea* of an active Power of Moving in Body, whilst we observe it only to transferr, but not produce any motion. For it is but a very obscure *Idea* of Power, which reaches not the Production of the Action, but the Continuation of the Passion: For so is Motion in a Body impelled by another; the continuation of the Alteration made in it from Rest to Motion, being little more an Action, than the continuation of the Alteration of its Figure by the same blow is an Action. The *Idea* of the beginning of Motion, we have only from reflection on what passes in our selves, where we find by Experience, that barely by willing it, barely by a thought of the Mind, we can move the parts of our Bodies, which were before at rest: So that it seems to me, we have from the observation of the operation of Bodies by our Senses, but a very imperfect obscure *Idea* of active Power, since they afford us not any *Idea* in themselves of the Power to begin any Action, either Motion or Thought. But if from the Impulse Bodies are observed to make one upon another, any one thinks he

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has a clear *Idea* of Power, it serves as well to my purpose, *Sensation* being one of those ways, whereby the Mind comes by its *Ideas*; only I thought it worth while to consider here by the way, whether the Mind doth not receive its *Idea* of *active Power* clearer from reflection on its own Operations, than it doth from any external *Sensation*.

§. 5. This at least I think evident, That we find in our selves a Power to begin or forbear, continue or end several, Thoughts of our Minds, and Motions of our Bodies, barely by the choice or preference of our Minds. This Power the Mind has to prefer the Consideration of any *Idea*, to the not considering it; or to prefer the Motion of any part of the Body, to its Rest, is that, I think, we call the *Will*; and the actual preferring one to another, is that we call *Volition*, or *Willing*. The power of Perception, is that we call the *Understanding*: Perception, which we make the act of the Understanding, is of three sorts: 1. The Perception of *Ideas* in our Minds. 2. The Perception of the signification of Signs. 3. The Perception of, the Agreement or Disagreement of any distinct *Ideas*. All these are attributed to the Understanding, or perceptive Power, though it be to the two latter, that in strictness of Speech, the act of Understanding is usually applied.

§. 6. These Powers of the Mind, *viz.* of Perceiving, and of Preferring, are usually call'd by another name; and the ordinary way of Speaking is, That the Understanding and Will, are two *Faculties* of the Mind; a word proper enough, if it be used as all Words should be, so as not to breed any confusion in Mens Thoughts, by being supposed (as I suspect it has been) to stand for some real Beings in the Soul, that performed those Actions of Understanding and Volition. For when we say the Will is the commanding and superiour Faculty of the Soul; that it is, or is not free; that it determines the inferiour Faculties; that it follows the Dictates of the Understanding, &c. though these and the like Expressions, by those that carefully attend to their own *Ideas*, and conduct their Thoughts more by the evidence of Things, than the sound of Words, may be understood in a clear and distinct sense; yet I suspect, I say, that this way of speaking of Faculties, has misled many into a confused Notion of so many distinct Agents in us, which had their several Provinces and Authorities, and did command, obey, and perform several Actions, as so many distinct Beings; which has been no small occasion of wrangling, obscurity, and uncertainty in Questions relating to them.

§. 7. Every one, I think, finds in himself a power to begin or forbear, continue or put an end to several Actions in himself. The power the Mind has at any time to prefer any particular one of those Actions to its forbearance, or *Vice versa*, is that Faculty which, as I have said, we call the *Will*; the actual exercise of that Power we call *Volition*; and the forbearance or performance of that Action, consequent to such a preference of the Mind, is call'd *Voluntary*. Hence we have the *Ideas* of *Liberty* and *Necessity*, which arise from the consideration of the extent of this Power of the Mind over the Actions, not only of the Mind, but the whole Agent, the whole Man.

§. 8. All the Actions that we have any *Idea* of reducing themselves, as has been said, to these two, *viz.* Thinking and Motion, so far as a Man has a power to think, or not to think; to move, or not to move, according to the preference of his own choice, so far is a Man *Free*. Where-ever any performance or forbearance are not equally in a Man's power; where-ever doing or not doing, will not equally follow upon the preference of his Mind, there he is not *Free*, though perhaps the Action may be voluntary.

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So that the *Idea* of *Liberty*, is the *Idea* of a Power in any Agent to do or forbear any Action, according to the determination or thought of the Mind, whereby either of them is preferr'd to the other ; where either of them is not in the Power of the Agent to be produced by him according to his preference, there is not *Liberty*, That Agent is under *Necessity*. So that Liberty cannot be, where there is no Thought, no Volition, no Will; but there may be Thought, there may be Will, there may be Volition, where there is no Liberty. A little Consideration of an obvious instance or two may make this clear.

§. 9. A Tennis-ball, whether in Motion by the stroke of a Racket, or lying still at rest, is not by any one taken to be a *free Agent*. If we enquire into the Reason, we shall find it is, because we conceive not a Tennis-ball to think, and consequently not to have any Volition, or preference of Motion to rest, or *vice versa*; and therefore has not *Liberty*, is not a free Agent ; but all its both Motion and Rest, come under our *Idea* of *Necessity*, and are so call'd. Likewise a Man falling into the Water, (a Bridge breaking under him,) has not herein liberty, is not a free Agent. For though he has Volition, though he prefers his not falling to falling ; yet the forbearance of that Motion not being in his Power, the stop or Cessation of that Motion follows not upon his Volition ; and therefore therein he is not free. So a Man striking himself, or his Friend, by a Convulsive motion of his Arm, which is not in his Power upon his Preference or Volition to forbear ; no Body thinks he has in this *Liberty* ; every one pities him, as acting by *Necessity* and Constraint.

§. 10. Again, suppose a Man be carried, whilst fast asleep, into a Room, where is a Person he longs to see and speak with ; and be there locked fast in, beyond his Power to get out : he awakes, and is glad to find himself in so desirable Company, which he stays willingly in, *i. e.* prefers his stay to going away ; I ask, Is not this stay voluntary ? I think, no Body will doubt it ; and yet being locked fast in, 'tis evident he is not at liberty not to stay, he has not freedom to be gone. So that *Liberty is not an Idea belonging to Volition*, or preferring ; but to the Person having the Power of doing, or forbearing to do, according as the Mind shall chuse. Our *Idea* of Liberty reaches as far as that Power, and no farther. For wherever restraint comes to check that Power, or compulsion, takes away that Indifferency to act, or not to act ; there liberty, and our Notion of it, presently ceases.

§. 11. We have instances enough, and often more than enough in our own Bodies. A Man's Heart beats, and the Blood circulates, which 'tis not in his Power by any Thought or Volition to stop ; and therefore in respect of these Motions, where rest depends not on his choice, nor would follow the determination of his Mind, if it should prefer it, he is not a free Agent. Convulsive Motions agitate his Legs ; so that though he wills it never so much, he cannot by any power of his Mind stop their Motion, (as in that odd Disease called *Chorea Sancti Viti*,) but he is perpetually dancing : He is not at Liberty in this Action, but under as much *Necessity* of moving, as a Stone that falls, or a Tennis-ball struck with a Racket. On the other side, a Palsie or Stocks hinder his Legs from obeying the determination of his Mind, if it would thereby transferr his Body to another Place. In all these there is want of Freedom, though the sitting still even of a Paralitick, whilst he prefers it to removal, is truly voluntary : *Voluntary* then is not opposed to *Necessary* ; but to *Involuntary*. For a Man may prefer what he can do, to what he cannot do ; the State he is in, to its absence or change, though *Necessity* has made it in it self unalterable.

§. 12.

§. 12. As it is in the Motions of the Body, so it is in the Thoughts of our Minds; where any one is such, that we have power to take it up, or lay it by, according to the preference of the Mind, there we are *at liberty*. A waking Man being under the necessity of having some *Ideas* constantly in his Mind, is not at liberty to think, or not to think; no more than he is at liberty, whether his Body shall touch any other, or no: But whether he will remove his Contemplation from one *Idea* to another, is many times in his choice; and then he is in respect of his *Ideas*, as much at liberty, as he is in respect of Bodies he rests on: He can at pleasure remove himself from one to another. But yet some *Ideas* to the Mind, like some Motions to the Body, are such, as in certain circumstances it cannot avoid, nor obtain their absence by the utmost effort it can use. A Man on the Rack, is not at liberty to lay by the *Idea* of pain, and entertain other Contemplations; and sometimes a boisterous Passion hurries our Thoughts, as a Hurricane does our Bodies, without leaving us the liberty of thinking on other things, which we would rather chuse: But as soon as the Mind regains the power to stop or continue, begin or forbear any of these Motions of the Body without, or Thoughts within, according as it thinks fit to prefer either to the other, then we consider the Man as a *free Agent* again.

§. 13. Where-ever Thought is wholly wanting, or the power to act or forbear, there *Necessity* takes place. This in an Agent capable of Volition, when the beginning or continuation of any Action is contrary to that preference of his Mind, is called *Compulsion*; when the hindring or stopping any Action is contrary to his Volition, it is called *Restraint*. Agents that have no Thought, no Volition at all, are in every thing necessary Agents.

§. 14. If this be so, (as I imagine it is,) I leave it to be considered, whether it may not help to put an end to that long agitated, and, I think, unreasonable, because unintelligible, Question, *viz. Whether Man's Will be free, or no*. For if I mistake not, it follows from what I have said, that the Question it self is altogether improper: And it is as insignificant to ask, whether Man's Will be free, as to ask, whether his Sleep be Swift, or his Vertue square; Liberty being as little applicable to the Will, as swiftness of Motion is to Sleep, or squareness to Vertue. Every one would laugh at the absurdity of such a Question as either of these, because it is obvious, that the modifications of Motion being not to sleep, nor the difference of Figure to Vertue; and when any one well considers it, I think he will as plainly perceive, that Liberty, which is but a power, belongs only to Agents, and cannot be an attribute or modification of the Will, which is also but a Power.

§. 15. *Volition*, 'tis plain, is nothing but the actual choosing or preferring forbearance to the doing, or doing to the forbearance, of any particular Action in our power, that we think on. And what is the *Will*, but the Faculty to do this? And is that Faculty any thing more in effect, than a Power, the power of preferring any Action to its Forbearance, or *vice versa*, as far as it appears to depend on us? For can it be denied, that whatever Agent has a power to think on its own Actions, and to prefer their doing or omission either to other, has that Faculty call'd *Will*. *Will* then is nothing but such a power; *Liberty*, on the other side, is the power a Man has to do or forbear doing any particular Action, according as its doing or forbearance has the actual preference in the Mind, which is the same thing as to say, according as he himself wills it.

§. 16. 'Tis plain then, That the *Will* is nothing but one Power or Ability, and *Freedom* another Power or Ability : So that to ask, whether the Will has Freedom, is to ask, whether one Power has another Power, one Ability another Ability ; a Question at first sight too grossly absurd to make a Dispute, or need an Answer. For who is it that sees not, that *Powers* belong only to Agents, and are *Attributes only of Substances*, and *not of Powers* themselves? So that this way of putting the question, *viz.* whether the Will be free, is in effect to ask, whether the Will be a Substance, an Agent, or at least to suppose it, since Freedom can properly be attributed to nothing else. If Freedom can with any propriety of Speech be applied to Power, it may be attributed to the Power, is in a Man, to produce, or forbear producing Motion in parts of his Body, by choice or preference ; which is that which denominates him free, and is Freedom it self. But if any one should ask, whether Freedom were free, he would be suspected not to understand well what he said ; and he would be thought to deserve *Midas's* Ears, who knowing that Rich was a denomination from the possession of Riches, should demand whether Riches themselves were rich.

§. 17. However the name *Faculty*, which Men have given to this Power call'd the Will, and so talked of it as acting, may by this appropriated term, seem a little to palliate the absurdity, yet the *Will* in truth, signifies nothing but a Power, or Ability, to prefer or choose ; and when considered, as it is, barely as an Ability to do something, it will easily discover the absurdity, in saying it is free, or not free. For if it be reasonable to suppose and talk of *Faculties*, as distinct Beings, that can act, (as we do, when we say the Will orders, and the Will is free,) 'tis fit that we should make a speaking Faculty, and a walking Faculty, and a dancing Faculty, by which those Actions are produced, which are but several Modes of Motion ; as well as we do the Will and Understanding to be Faculties, by which the Actions of Choosing and Perceiving are produced, which are but several Modes of Thinking ; and we may as properly say, that 'tis the singing Faculty sings, and the dancing Faculty dances, as that the Will chooses, or that the Understanding conceives ; or, as is usual, that the Will directs the Understanding, or the Understanding obeys, or obeys not the Will. It being altogether as proper and intelligible to say, that the power of Speaking directs the power of Singing, or the power of Singing obeys or disobeys the power of Speaking.

§. 18. This way of talking, nevertheless, has prevailed, and, as I guess, produced great confusion ; for these being all different Powers in the Mind, or in the Man, to do several Actions, he exerts them as he thinks fit ; but the power to do one Action, is not operated on by the power of doing another Action. For the power of Thinking operates not on the power of Choosing ; nor the power of Choosing on the power of Thinking, no more than the power of Dancing operates on the power of Singing, or the power of Singing on the power of Dancing, as any one may easily perceive, who will but consider ; and yet that is it which we say, when we thus speak, that *the Will operates on the Understanding, or the Understanding on the Will.*

§. 19. I grant, that this or that actual Thought, may be the occasion of Volition, or exercising the power a Man has to choose ; or the actual choice of the Mind, the cause of actual thinking on this or that thing : As the actual singing of such a Tune, may be the occasion of dancing such a Dance, and the actual dancing of such a Dance, the occasion of singing such a Tune : But in all these, it is not one power that operates on another ;
for

for Powers are Relations, not Agents: but it is the Mind, or the Man, that operates, and exerts these Powers; that does the Action, he has power, or is able to do. *That which has the power, or not the power to operate, is that alone, which is, or is not free; and not the Power it self: for Freedom, or not Freedom, can belong to nothing, but what has, or has not a power to act.*

§. 20. The attributing to *Faculties*, that which belonged not to them, has given occasion to this way of talking: but the introducing into Discourses concerning the Mind, with the name of Faculties, a Notion of their operating, has, I suppose, as little advanced our Knowledge in that part of our selves, as the great use and mention of the like invention of Faculties, in the operations of the Body, has helped us in the knowledge of Physick. Not that I deny there are Faculties both in the Body and Mind: they both of them have their powers of Operating, else neither the one nor the other could operate: For nothing can operate, that is not able to operate; and that is not able to operate, that has no power to operate. Nor do I deny, that those Words, and the like, are to have their place in the common use of Languages, that have made them current. It looks like too much affectation wholly to lay them by: and Philosophy it self, though it likes not a gaudy dress, yet when it appears in publick, must have so much Complacency, as to be cloathed in the ordinary Fashion and Language of the Country, so far as it can consist with Truth and Perspicuity. But the fault has been, that Faculties have been spoken of, and represented, as so many distinct Agents: For it being asked, what it was that digested the Meat in our Stomachs? it was a ready, and very satisfactory Answer, to say, That it was the digestive Faculty. What was it that made any thing come out of the Body? The expulsive Faculty. What moved? The Motive Faculty: And so in the Mind the intellectual Faculty, or the Understanding, understood; and the elective Faculty, or the Will, willed or commanded: which is in short to say, That the ability to digest, digested; and the ability to move, moved; and the ability to understand, understood. For Faculty, Ability, and Power, I think, are but different names of the same things: Which ways of speaking, when put into more intelligible Words, will, I think, amount to thus much; That Digestion is performed by something that is able to digest; Motion by something able to move; and Understanding by something able to understand. And in truth it would be very strange if it should be otherwise; as strange as it would be for a Man to be free without being able to be free.

§. 21. To return then to the Enquiry about Liberty, I think *the Question is not proper, whether the Will be free, but whether a Man be free.* Thus, I think,

1. That so far as any one can, by choice, or preference of the existence of any Action, to the non-existence of that Action, and, *vice versa*, make it to exist, or not exist; so far he is free: For if I can, by the preference of the motion of my Finger to its rest, make it move, or *vice versa*, 'tis evident, that in respect of that, I am free: and if I can, by a like thought of my Mind, preferring one to the other, produce either words, or silence, I am at liberty to speak, or hold my peace: and as far as this Power reaches, of acting, or not acting, by the determination of his own Thought preferring either, so far is a Man free. For how can we think any one freer than to have the power to do what he will? And so far as any one can (by preferring any Action to its not being; or Rest to any Action) produce that Action or Rest, so far can he do, what he will: For such a preferring of

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Action to its absence, is the willing of it : and we can scarce tell how to imagine any *Being* freer, than to be able to do what he will : So that in respect of Actions, within the reach of such a power in him, a Man seems as free, as 'tis possible for Freedom to make him.

§. 22. But the inquisitive Mind of Man, willing to shift off from himself, as far as he can, all thoughts of guilt, though it be by putting himself into a worse state than that of fatal Necessity, is not content with this; will have this to be no freedom, unless it reaches farther : but is ready to say, a Man is not free at all, if he be not as free to will, as he is to act, what he wills. Concerning a Man's Liberty there yet therefore is raised this farther Question, *Whether a Man be free to will*; which, I think, is that meant, when it is disputed, Whether the will be free : And as to that, I imagine,

§. 23. 2. That Willing, or Choosing being an Action, and Freedom consisting in a power of acting, or not acting, *a Man in respect of willing any Action in his power once proposed to his Thoughts, cannot be free.* The reason whereof is very manifest : for it being unavoidable that the Action depending on his Will, should exist, or not exist ; and its existence, or not existence, following perfectly the determination, and preference of his Will, he cannot avoid willing the existence, or not existence, of that Action; it is absolutely necessary that he *will* the one, or the other, *i.e.* prefer the one to the other: since one of them must necessarily follow ; and that which does follow, follows by the choice and determination of his Mind ; that is, by his *willing* it : for if he did not *will* it, it would not be. So that in respect of the act of willing, a Man is not free: Liberty consisting in a power to act, or not to act, which, in regard of Volition, a Man has not ; it being necessary, and unavoidable (any Action in his power being once thought on) to prefer either its doing, or forbearance, upon which preference, the Action, or its forbearance certainly follows, and is truly voluntary. So that to make a Man free in this sense, there must be another antecedent *Will*, to determine the Acts of this *Will*, and another to determine that, and so *in infinitum* : for where-ever one stops, the Actions of the last Will cannot be free : Nor is any Being, as far as I can comprehend Beings above me, capable of such a freedom of Will, that it can forbear to *Will*, *i.e.* to prefer the being, or not being of any thing in its power, which it has once considered as such.

§. 24. This then is evident, *A Man is not at liberty to will, or not to will any thing in his power, that he once considers of*: Liberty consisting in a power to act, or not to act, and in that only. For a Man that sits still, is said yet to be at liberty, because he can walk if he wills it. A Man that walks is at liberty in that respect : not because he walks, or moves; but because he can stand still if he wills it. But if a Man sitting still has not a power to remove himself, he is not at liberty : nor a Man falling down a precipice, though in motion, is not at liberty, because he cannot stop that motion if he would : But a Man that is walking, to whom it is proposed to give off walking, is not at liberty, whether he will *will*, or no : he must necessarily prefer one, or t'other of them ; walking or not walking : and so it is in regard of all other Actions in our power; they being once proposed, the Mind has not a power to act, or not to act, wherein consists Liberty : It has not a power to forbear *willing*, it cannot avoid some determination concerning them, let the Consideration be as short, the Thought as quick as it will, it either leaves the Man in the state he was before thinking, or changes it : whereby it is manifest it prefers one to the other, and thereby either the continuation, or change becomes unavoidably voluntary.

§. 25.

§. 25. Since then it is plain, a Man is not at liberty, whether he will *Will*, or no ; (for when a thing in his power is proposed to his Thoughts, he cannot forbear Volition, he must determine one way or other ;) the next thing to be demanded is, *Whether a Man be at liberty to will which of the two he pleases, Motion or Rest.* This Question carries the absurdity of it so manifestly in it self, that one might thereby sufficiently be convinced, that Liberty concerns not the Will in any case. For to ask, whether a man be at liberty to will either Motion, or Rest; Speaking, or Silence; which he pleases, is to ask, whether a Man can will, what he wills ; or be pleased with what he is pleased with. A Question which, I think, needs no answer : and they, who can make a Question of it, must suppose one Will to determine the Acts of another, and another to determinate that ; and so on *in infinitum*, an absurdity before taken notice of.

§. 26. To avoid these, and the like absurdities, nothing can be of greater use, than to establish in our Minds clear and steady Notions of the things under Consideration: if the *Ideas* of Liberty, and Volition, were well fixed in our Understandings, and carried along with us in our Minds, as they ought, through all the Questions are raised about them, I suppose, a great part of the Difficulties, that perplex Mens Thoughts, and entangle their Understandings, would be much easier resolved ; and we should perceive where the confused signification of terms, or where the nature of the thing caused the obscurity.

§. 27. First then, it is carefully to be remembred, That *Freedom consists in the dependence of the Existence, or not Existence of any Action, upon our Volition of it, and not in the dependence of any Action, or its contrary, on our preference.* A Man standing on a cliff, is at liberty to leap twenty Yards downwards into the Sea ; not because he has a power to do the contrary Action, which is to leap twenty Yards upwards, for that he cannot do : but he is therefore free, because he has a power to leap, or not to leap. But if a greater force than his, either hold him fast, or tumble him down, he is no longer free in that case : because the doing, or forbearance, of that particular Action, is no longer in his power. He that is a close Prisoner, in a Room twenty foot square, being at the North-side of his Chamber, is at liberty to walk twenty foot Southward, because he can walk, or not walk it : but is not, at the same time, at liberty, to do the contrary ; *i. e.* to walk twenty foot Northward.

In this then consists Freedom (*viz.*) in our being able to act, or not to act, according as we shall choose, or will.

§. 28. Secondly, In the next place we must remember, that *Volition or Willing*, regarding only what is in our power, is nothing but the *preferring* the doing of any thing, to the not doing of it ; Action to Rest, & *contra.* Well, but what is this *Preferring* ? It is nothing but the *being pleased more with the one, than the other.* Is then a Man indifferent to be pleased, or not pleased, more with one thing than another ? Is 'it in his choice, whether he will, or will not be better pleased with one thing than another ? And to this, I think, every one's Experience is ready to make answer, No. From whence it follows,

§. 29. Thirdly, That the Will, or Preference, is determined by something without it self: Let us see then what it is determined by. If willing be but the being better pleased, as has been shewn, it is easie to know what 'tis determines the Will, what 'tis pleases best : every one knows 'tis Happiness, or that which makes any part of Happiness, or contributes to it ; and that is it we call *Good.* Happiness and Misery are the names of two extremes, the utmost bounds whereof we know not : 'tis what *Eye hath not seen,*

Ear hath not heard, nor hath entred into the Heart of Man to conceive. But of some degrees of both, we have very lively impressions made by several instances of Delight and Joy on the one side, and Torment and Sorrow on the other: which, for shortness sake, I shall comprehend under the names of Pleasure and Pain, there being pleasure and pain of the Mind, as well as the Body: *With Him is fulness of Joy, and Pleasures for evermore:* Or to speak truly, they are all of the Mind; though some have their rise in the Mind from Thought, others in the Body from Motion. Happiness then is the utmost Pleasure we are capable of, and Misery the utmost Pain. Now because Pleasure and Pain are produced in us, by the operation of certain Objects, either on our Minds, or our Bodies; and in different degrees: therefore what has an aptness to produce pleasure in us, is that we labour for, and is that we call *Good*; and what is apt to produce pain in us, we avoid and call *Evil*, for no other reason, but for its aptness to produce Pleasure and Pain in us, wherein consists our happiness or misery. Farther, because the degrees of Pleasure and Pain have also justly a preference; though what is apt to produce any degree of Pleasure, be in it self good; and what is apt to produce any degree of Pain, be evil; yet it often happens, that we do not call it so, when it comes in competition with a greater of its sort. So that if we will rightly estimate what we call *Good* and *Evil*, we shall find it lies much in comparison: For the cause of every less degree of Pain, as well as every greater degree of Pleasure, has the nature of Good, and *vice versa*, and is that which determines our Choice, and challenges our Preference. *Good then, the greater Good is that alone which determines the Will.*

§. 30. This is not an imperfection in Man, it is the highest perfection of intellectual Natures: it is so far from being a restraint or diminution of Freedom, that it is the very improvement and benefit of it: 'tis not an Abridgment, 'tis the end and use of our Liberty: and the farther we are removed from such a determination to Good, the nearer we are to Misery and Slavery. A perfect Indifferency in the Will, or Power of Preferring, not determinable by the Good or Evil, that is thought to attend its Choice, would be so far from being an advantage and excellency of any intellectual Nature, that it would be as great an imperfection, as the want of Indifferency to act, or not to act, till determined by the Will, would be an imperfection on the other side. A Man is at liberty to lift up his Hand to his Head, or let it rest quiet: He is perfectly indifferent to either; and it would be an imperfection in him, if he wanted that Power, if he were deprived of that Indifferency. But it would be as great an imperfection, if he had the same Indifferency, whether he would prefer the lifting up his Hand, or its remaining in rest, when it would save his Head or Eyes from a blow he sees coming: *'tis as much a perfection, that the power of Preferring should be determined by Good, as that the power of Acting should be determined by the Will; and the certainer such determination is, the greater is the perfection.*

§. 31. If we look upon those *superiour Beings* above us, who enjoy perfect Happiness, we shall have reason to judge they are more steadily *determined in their choice of Good* than we: and yet we have no reason to think they are less happy, or less free, than we are. And if it were fit for such poor finite Creatures as we are, to pronounce what infinite Wisdom and Goodness could do, I think we might say, That God himself cannot choose what is not good; the Freedom of the Almighty hinders not his being determined by what is best.

§. 32. But to consider this mistaken part of Liberty right, Would any one be a Changeling, because he is less determined, by wise Considerations, than a wise Man? Is it worth the Name of Freedom to be at liberty to play the Fool, and draw Shame and Misery upon a Man's self? If want of restraint to chuse, or to do the worse, be Liberty, true Liberty, mad Men and Fools are the only free-men: but yet, I think, no Body would chuse to be mad for the sake of such Liberty, but he that is mad already.

§. 33. But though the preference of the Mind be always determined by the appearance of Good, greater Good; yet the Person who has the Power, in which alone consists liberty to act, or not to act according to such preference, is nevertheless free, such determination abridges not that Power. He that has his Chains knocked off, and the Prison-doors set open to him, is perfectly at liberty, because he may either go or stay, as he best likes; though his preference be determined to stay by the darkness of the Night, or illness of the Weather, or want of other Lodging. He ceases not to be free; though that which at that time appears to him the greater Good absolutely determines his preference, and makes him stay in his Prison. I have rather made use of the Word *Preference* than *Choice*, to express the act of Volition, because choice is of a more doubtful signification, and bordering more upon Desire, and so is referred to things remote; whereas Volition, or the Act of Willing, signifies nothing properly, but the actual producing of something that is voluntary.

§. 34. The next thing to be considered is, If our Wills be determined by Good, *How it comes to pass that Men's Wills carry them so contrarily*, and consequently some of them to what is Evil? And to this I say, that the various and contrary choices, that Men make in the World, doe not argue, that they do not all chuse Good; but that the same thing is not good to every Man. Were all the Concerns of Man terminated in this Life; why one pursued Study and Knowledge, and another Hawking and Hunting; why one chose Luxury and Debauchery, and another Sobriety and Riches, would not be, because every one of these did not pursue his own Happiness; but because their Happiness lay in different things: And therefore 'twas a right Answer of the Physician to his Patient, that had sore Eyes. If you have more Pleasure in the Taste of Wine, than in the use of your Sight, Wine is good for you: but if the Pleasure of Seeing be greater to you, than that of Drinking, Wine is naught.

§. 35. The Mind has a different relish, as well as the Palate; and you will as fruitlessly endeavour to delight all Men with Riches or Glory, (which yet some Men place their Happiness in,) as you would to satisfy all Men's Hunger with Cheese or Lobsters; which, though very agreeable and delicious fare to some, are to others extremely nauseous and offensive: And many People would with Reason prefer the griping of an hungry Belly, to those Dishes, which are a Feast to others. Hence it was, I think, that the Philosophers of old did in vain enquire, whether *Summum bonum* consisted in Riches, or bodily Delights, or Virtue, or Contemplation: And they might have as reasonably disputed, whether the best Relish were to be found in Apples, Plumbs, or Nuts; and have divided themselves into Sects upon it. For as pleasant Tastes depend not on the things themselves, but their agreeableness to this or that particular Palate, wherein there is great variety: So the greatest Happiness consists, in the having those things which produce the greatest Pleasure, and the absence of those which cause any disturbance, any pain, which to different Men are very different things.

If

If therefore Men in this Life only have hope; if in this Life they can only enjoy, 'tis not strange, nor unreasonable, they should seek their Happiness by avoiding all things that disease them here, and by preferring all that delight them; wherein it will be no wonder to find variety and difference. For if there be no Prospect beyond the Grave, the inference is certainly right, *Let us eat and drink*, let us enjoy what we delight in, *for to morrow we shall die*. This, I think, may serve to shew us the Reason, why, though all Men's Wills are determined by Good, yet they are not determined by the same Object. Men may chuse different things, and yet all chuse right, supposing them only like a Company of poor Insects, whereof some are Bees, delighted with Flowers, and their sweetness; others Scarabes, delighted with other kind of Viands; which having enjoyed for a Season, they should cease to be, and exist no more for ever.

§. 36. This sufficiently discovers to us, why Men in this World prefer different things, and pursue Happiness by contrary Courses: But yet since Men are always determined by Good, the greater Good; and are constant, and in earnest, in matter of Happiness and Misery, the Question still remains, *How Men come often to prefer the worse to the better*; and to chuse that, which by their own Confession has made them miserable?

§. 37. To this I answer, That as to present Happiness, or Misery; present Pleasure or Pain, when that alone comes in Consideration, a Man never chuses amiss: he knows what best pleases him, and that, he actually prefers. Things in their present enjoyment, are what they seem: the apparent and real good, are, in this case, always the same. For the Pain or Pleasure being just so great, and no greater, than it is felt, the present Good or Evil is really so much as it appears. And therefore were every Action of ours concluded within it self, and drew no Consequences after it, we should undoubtedly always will nothing but Good; always infallibly prefer the best. Were the pains of honest Industry, and of starving with Hunger and Cold set together before us, no Body would be in doubt which to chuse: were the satisfaction of a Lust, and the Joys of Heaven offered at once to any one's present Possession, he would not balance, or err in the choice, and determination of his Will. But since our voluntary Actions carry not all the Happiness, and Misery, that depend on them, along with them in their present performance; but are the precedent Causes of Good and Evil, which they draw after them, and bring upon us, when they themselves are passed, and cease to be; *that which has the Preference*, and makes us will the doing or omitting any Action in our Power, *is the greater Good*, appearing to result from that choice in all its Consequences, as far as at present they are represented to our view.

§. 38. So that, *that which determines the choice of the Will*, and obtains the preference, *is still Good, the greater Good*: But it is also only Good *that appears*; that which carries with it the Expectation of Addition to our Happiness, by the increase of our Pleasures, either in Degrees, Sorts, or Duration, or by the preventing, lessening, or shortning of pain. Thus the Temptation of a pleasant Taste, brings a Surfeit, a Disease, and, perhaps, Death too, on one, who looks no farther than that apparent Good, than the present Pleasure; who sees not the remote and concealed Evil: and the hopes of easing or preventing some greater pain, sweetens another Man's Draught, and makes that willingly be swallowed, which in it self is nauseous and unpleasant. Both these Men were moved to what they did by the appearance of Good, though the one found Ease and Health, and the other a Disease and Destruction: and therefore to him that looks beyond this World, and is fully persuaded, that God the righteous Judge, will

will render to every Man according to his Deeds; To them who by patient continuance in well doing, seek for Glory, and Honour, and Immortality, Eternal Life; but unto every Soul that doth Evil, Indignation and Wrath, Tribulation and Anguish: To him, I say, who hath a prospect of the different State of perfect Happiness, or Misery that attends all Men after this Life, depending on their Behaviour here, the measures of Good and Evil, that govern his choice, are mightily changed. For since nothing of Pleasure and Pain in this Life, can bear any proportion to endless Happiness, or exquisite Misery of an immortal Soul hereafter, Actions in his Power will have their preference, not according to the transient Pleasure, or Pain that accompanies, or follows them here; but as they serve to secure that perfect durable Happiness hereafter.

§. 36. Hethen that will account for the Misery, that Men often bring on themselves, notwithstanding that they do all in earnest pursue Happiness, and always prefer the greater apparent Good, must consider, how *Things* come to be *represented* to our choice, *under deceitful appearances*: and that is, *by the Judgment* pronouncing wrongly concerning them. To see how far this reaches, and what are the Causes of wrong Judgment, we must remember, that things are judged good or bad in a double Sense.

First, That which is properly good or bad, is nothing but barely Pleasure or Pain.

Secondly, But because not only present Pleasure and Pain, but that also which is apt by its efficacy, or consequences, to bring it upon us at a distance, cannot but move the Will, and determine the choice of a Creature, that has foresight; therefore *things* also *that draw after them Pleasure and Pain, are considered as Good and Evil.*

§. 40. The *wrong Judgment* that *misleads* us, and makes the Will often fasten on the worse side, lies in misreporting upon the various Comparisons of these. The wrong Judgment I am here speaking of, is not what one Man may think of the determination of another; but what every Man himself must confess to be wrong. For since I lay it for a certain ground, that every intelligent Being really seeks Happiness, and would enjoy all the pleasures he could, and suffer no pain; 'tis impossible any one should willingly put into his own draught any bitter Ingredient, or leave out any thing in his Power, that could add to its sweetness, but only by a wrong Judgment. I shall not here speak of that mistake, which is the consequence of invincible Error, which scarce deserves the Name of wrong Judgment; but of that wrong Judgment, which every Man himself must confess to be so.

§. 41. I. Therefore, as to present Pleasure and Pain, the Mind as has been said, never mistakes that which is really good or evil: that which is the greater Pleasure, or the greater Pain, is really just, as it appears. But though present Pleasure and Pain, shew their difference and degrees so plainly, as not to leave room for mistake; yet *when we compare present Pleasure or Pain with future, we often make wrong Judgments* of them, taking our measures of them in different positions of distance. Objects near our view, are apt to be thought greater than those of a larger size, that are more remote: and so it is with Pleasures and Pains, the present is apt to carry it, and those at a distance have the disadvantage in the Comparison. Thus most Men, like spend-thrift Heirs, are apt to judge a little in Hand better than a great deal to come; and so for small Matters in Possession, part with great ones in Reversion: but that this is a wrong Judgment every one must allow, let his pleasure consist in whatever it will,

will: since that which is future, will certainly come to be present; and then having the same advantage of nearness, will shew its self in its full dimensions, and discover his wilful mistake, who judged of it by unequal measures. Were the Pleasure of Drinking accompanied, the very moment a Man takes off his Glass, with that sick Stomach, and akeing Head, which in some Men are sure to follow not many hours after, I think no body, whatever Pleasure he had in his Cups, would, on these Conditions, ever let Wine touch his Lips; which yet he gaily swallows, and the evil side comes to be chosen only by the fallacy of a little difference in time. But if Pleasure or Pain can be so lessened only by a few hours removal, how much more will it be so, by a farther distance, to a Man, that will not (by a due consideration, do, what time will, *i.e.* bring it home upon himself) consider it as present, and there take its true dimensions? This is the way we usually impose on our selves, in respect of bare Pleasure and Pain, or the true degrees of Happiness or Misery: The future loses its just proportion, and what is present, obtains the preference as the greater. I mention not here the wrong Judgment, whereby the absent are not only lessened, but reduced to perfect nothing; when Men enjoy what they can in present, and make sure of that, concluding amiss, That no evil will thence follow: For that lies not in comparing the greatness of future Good and Evil, which is that we are here speaking of: But in another sort of wrong Judgment, which is concerning Good or Evil, as it is considered, to be the cause and procurement of Pleasure or Pain; that will follow from it.

§. 42. The cause of our judging amiss, when we compare our present Pleasure or Pain with future, seems to me to be *the weak and narrow Conceptions of our Minds*. We cannot well enjoy two Pleasures at once, much less any Pleasure almost, whilst Pain possesses us. The present Pleasure, if it be not very languid, and almost none at all, fills our narrow Souls, and so takes up all our Minds, that it scarce leaves any thought of things absent: Or if many of our Pleasures are not strong enough to exclude the consideration of things at a distance; yet we have so great an abhorrence of Pain, that a little of it extinguishes all our Pleasures. A little bitter mingled in our Cup, leaves no relish of the sweet: and hence it comes, that at any rate we desire to be rid of the present Evil, which we are apt to think nothing absent can equal; since while the Pain remains, we find not our selves capable of any the least degree of Happiness. Hence we see the present Pain, any one suffers, is always the worst; and 'tis with anguish they cry out, *Any other rather than this; nothing can be so intolerable as what I now suffer.* And therefore our whole Endeavours and Thoughts are intent to get rid of the present Evil before all things, as the first necessary step towards Happiness, let what will follow. Nothing, as we passionately think, can exceed, or almost equal the Pain we feel; and because the abstinence from a present Pleasure that offers it self, is a sort of Pain; nay, oftentimes a very great one, 'tis no wonder, that that operates after the same manner Pain does, and lessens in our Thoughts what is future, and so forces us, as it were, blindfold into its embraces. Thus much of the wrong Judgment we make of present and future Pleasure and Pain, when they are compared together; and so the absent considered as future.

§. 43. II. As to things good or bad in their Consequences, and by the aptness is in them to procure us good or Evil in the future, we judge amiss several ways.

1. When we judge that so much Evil does not really depend on them, as in truth there does.

2. When

2. When we judge, that though the Consequence be of that moment, yet it is not of that certainty, but that it may otherwise fall out; or else by some means be avoided, as by industry, address, change, repentance, &c. But that these are wrong ways of judging, were easie to shew in every particular, if I would examine them at large singly; but I shall only mention this in general, *viz.* That it is a very wrong, and irrational way of proceeding, to venture a greater Good and Evil, for a less, upon uncertain guesses, and before due, and through examination, as far as a Man's knowledge can, by any endeavours or assistance, attain. This, I think, every one must confess, especially if he considers the usual *Causes* of this *wrong Judgment*, whereof these following are some.

§. 44. I. *Ignorance*: He that judges without informing himself to the utmost that he is capable, cannot acquit himself of judging amiss.

II. *Inadvertency*: When a Man overlooks even that which he does know. This is an affected and present Ignorance, which misleads our Judgments, as much as the other. Judging is, as it were, balancing an account, and determining on which side the odds lies. If therefore either side be huddled up in haste, and several of the Summs, that should have gone into the reckoning, be overlook'd and left out, this Precipitancy causes as wrong a Judgment, as if it were a perfect Ignorance. That which most commonly causes this, is the prevalency of some present Pleasure, heightened by our feeble passionate Nature, most strongly wrought on by what is present. To check this Precipitancy, our Understanding and Reason was given us, if we will make a right use of it, to search, and see, and then judge thereupon. How much sloth and negligence, heat and passion, the prevalency of fashion, or acquired indispositions, do severally contribute, on occasion to these wrong Judgments, I shall not here farther enquire.

§. 45. This, I think, is certain, That the choice of the Will is every-where determined by the greater apparent Good, however it may be wrong represented by the Understanding; and it would be impossible Men should pursue so different Courses as they do in the World, had they not different Measures of Good and Evil. But yet Morality, established upon its true Foundations, cannot but determine the Choice in any one that will but consider: and he that will not be so far a rational Creature, as to reflect seriously upon infinite Happiness and Misery, must needs condemn himself, as not making that use of his Understanding he should. The Rewards and Punishments of another Life, which the Almighty has established as the Enforcements of his Law, are of weight enough to determine the Choice, against whatever Pleasure or Pain this Life can shew, when the eternal State is considered in its bare possibility, which no Body can deny. He that will allow exquisite and endless Happiness to be but the possible consequence of a good Life here, or the contrary state the possible Reward of a bad one, must own himself to judge very much amiss, if he does not conclude, That a vertuous Life, with the certain expectation of everlasting Bliss, which may come, is to be preferred to a vicious one, with the fear of that dreadful state of Misery, which 'tis very possible may overtake the guilty; or at best the terrible uncertain hope of Annihilation. This is evidently so, though the vertuous Life here had nothing but Pain, and the vicious continual pleasure; which yet is for the most part quite otherwise, and wicked Men have not much the odds to brag of, even in their present possession; nay, all things rightly considered, have, I think even the worse part here. But when infinite Happiness is put in one Scale, against infinite Misery in the other; if the

worst, that comes to the pious Man, if he mistake, be the best that the wicked can attain to, if he be in the right, Who can without madness run the venture? Who in his Wits would chuse to come within a possibility of infinite Misery, which if he miss, there is yet nothing to be got by that hazard? Whereas on the other side, the sober Man ventures nothing against infinite Happiness to be got, if his Expectation comes to pass. If the good Man be in the right, he is eternally happy: if he mistake, he is not miserable, he feels nothing. On the other side, if the wicked be in the right, he is not happy: if he mistake, he is infinitely miserable. Must it not be a most manifest wrong Judgment, that does not presently see, to which side, in this case, the preference is to be given. I have forbore to mention any thing of the certainty, or probability of a future State, designing here to shew the wrong Judgment, that any one must allow, he makes, upon his own Principles laid how he pleases, who prefers the short pleasures of a vicious Life upon any consideration, whilst he knows, and cannot but be certain, that a future Life is at least possible.

§. 46. Under this simple *Idea* of Power, I have taken occasion to explain our *Ideas* of *Will*, *Volition*, *Liberty*, and *Necessity*; which having a greater mixture in them, than belongs barely to simple Modes, might perhaps, be better placed amongst the more complex. For *Will*, for example, contains in it the *Idea* of a Power to prefer the doing, to the not doing any particular Action (& *vice versa*) which it has thought on; which preference is truly a Mode of Thinking, and so the *Idea* which the word *Will* stands for, is a complex and mixed one, made up of the simple *Ideas* of Power, and a certain Mode of Thinking: and the *Idea* of *Liberty* is yet more complex, being made up of the *Idea* of a Power to act, or not to act, in conformity to Volition. But I hoped this transgression, against the method I have proposed to my self, will be forgiven me, if I have quitted it a little, to explain some *Ideas* of great importance; such as are those of the *Will*, *Liberty*, and *Necessity*, in this place, where they, as it were, offered themselves, and sprang up from their proper roots. Besides, having before largely enough instanced in several simple Modes, to shew what I meant by them, and how the Mind got them, (for I intend not to enumerate all the particular *Ideas* of each sort,) these of *Will*, *Liberty*, and *Necessity*, may serve as instances of mixed Modes, which are that sort of *Ideas* I purpose next to treat of.

§. 47. And thus I have, in a short draught, given a view of our original *Ideas*, from whence all the rest are derived, and of which they are made up; which if I would consider, as a Philosopher, and examine on what Causes they depend, and of what they are made, I believe they all might be reduced to these very few primary, and original ones, *viz.*

Extension,
Solidity,
Mobility;

which by our Senses we receive from Body:

Thinking, and the
Power of Moving;

which by reflection we receive from our Minds; to which if we add

Existence,
Duration,
Number;

which belong both to the one, and the other, we have, perhaps, all the original

ginal *Ideas* on which the rest depend. For by these, I imagine, might be explainted the nature of Colours, Sounds, Tastes, Smells, and all other *Ideas* we have, if we had but Faculties acute enough to perceive the severally modified Extensions, and Motions, of these minute Bodies; which produce those several Sensations in us. But my present purpose being to enquire only into the Knowledge the Mind has of Things, by those *Ideas*, and Appearances *God* has fitted it to receive from them, and how the Mind comes by that Knowledge; rather than into their Causes, or manner of Production, I shall not, contrary to the Design of this Essay, set myself to enquire philosophically into the peculiar Constitution of Bodies, and the Configuration of Parts, whereby they have the power to produce in us the *Ideas* of their sensible Qualities: I shall not enter any farther into that Disquisition; it sufficing to my purpose to observe, That Gold, or Saffron, has a power to produce in us the *Idea* of Yellow; and Snow, or Milk, the *Idea* of White; which we can have only by our Sight, without examining the Texture of the Parts of those Bodies, or the particular Figures, or Motion of the Particles, which rebound from them, to cause in us that particular Sensation: Though when we go beyond the bare *Ideas* in our Minds, and would enquire into their Causes, we cannot conceive any thing else, to be in any sensible Object, whereby it produces different *Ideas* in us, but the different Bulk, Figure, Number, Texture, and Motion of its insensible Parts.

C H A P. XXII.

Of Mixed Modes.

§. 1. **H**AVING treated of *Simple Modes* in the foregoing Chapters, and given several instances of some of the most considerable of them, to shew what they are, and how we come by them; we are now in the next place to consider those we call *Mixed Modes*, such are the Complex *Ideas*, we make by the names Obligation, Drunkenness, a Lie, &c. which consisting of several Combinations of simple *Ideas* of different kinds, I have called *Mixed Modes*, to distinguish them from the more simple Modes, which consists only of simple *Ideas* of the same kind. These mixed Modes being also such Combinations of simple *Ideas*, as are not looked upon to be the characteristical Marks of any real Beings that have a steady existence, but scattered and independent *Ideas*, put together by the Mind, are thereby distinguished from the complex *Ideas* of Substances.

§. 2. That the Mind, in respect of its simple *Ideas*, is wholly passive, and receives them all from the Existence and Operations of Things, such as Sensation or Reflection offers them, without being able to make any one *Idea* Experience shews us. But if we attentively consider these *Ideas* I call *mixed Modes*, we are now speaking of, we shall find their Original quite different. The Mind here often exercises an active Power in the making these several Combinations: for it being once furnished with simple *Ideas*, it can put them together in several Compositions, and so make variety of complex *Ideas*, without examining whether they exist so together in Nature. And hence, I think, it is, that these sort of *Ideas* are called *Notions*; as if they had their Original, and constant Existence more

in the Thoughts of Men, than in the reality of things; and to form such *Ideas*, it sufficed, that the Mind put the parts of them together, and that they were consistent in the Understanding, without considering whether they had any real Being. Though I do not deny, but several of them might be taken from Observation, and the Existence of several simple *Ideas* so combined, as they are put together in the Understanding: For the Man who first framed the *Idea* of Hypocrisie, might have either taken it at first from the observation of one, who made shew of good Qualities which he had not; or else have framed that *Idea* in his Mind, without having any such pattern to fashion it by. For it is evident, that in the beginning of Languages, and Societies of Men, several of those complex *Ideas*, which were consequent to the Constitutions established amongst them, must needs have been in the Minds of Men, before they existed any where else; and that many names, that stood for such complex *Ideas*, were in use, and so those *Ideas* framed, before the Combinations they stood for, ever existed.

§. 3. Indeed, now that Languages are made, and abound with words standing for them, *an usual way of getting these complex Ideas, is by the explication of those terms that stand for them.* For consisting of a company of simple *Ideas* combined, they may by words, standing for those simple *Ideas*, be represented to the Mind of one who understands those words, though that complex Combination of simple *Ideas* were never offered to his Mind by the real existence of things. Thus a Man may come to have the *Idea* of Sacrilege, or Murther, by enumerating to him the simple *Ideas* these words stand for, without ever seeing either of them committed.

§. 4. Every *mixed Mode* consisting of many distinct simple *Ideas*, it may be well enquired, *whence it has its Unity*; and how such a precise multitude comes to make but one *Idea*, since that Combination does not always exist together in Nature: And this, it is plain, it has from an Act of the Mind combining those several simple *Ideas* together, and considering them as one complex one, consisting of those parts; and the mark of this Union, or that which is looked on generally to compleat it, is one name given to that Combination. For 'tis by their names, that Men commonly regulate their account of their distinct Species of mixed Modes, seldom allowing or considering any number of simple *Ideas*, to make one complex one, but such Collections as there be names for. Thus, though the killing of an old Man be as fit in Nature to be united into one complex *Idea*, as the killing a Man's Father; yet there being no name standing precisely for the one, as there is the name of Parricide to mark the other, it is not taken for a particular complex *Idea*, nor a distinct Species of Actions, from that of killing a young Man, or any other Man.

§. 5. If we should enquire a little farther, to see *what* it is, that *occasions Men to make several Combinations of simple Ideas* into distinct, and, as it were, settled *Modes*, and neglect others; which in the Nature of Things themselves, have as much an aptness to be combined, and make distinct *Ideas*, we shall find the reason of it to be the end of Language; which being to mark, or communicate Mens Thoughts to one another, with all the dispatch that may be, they usually make such Collections of *Ideas* into complex Modes, and affix names to them, as they have frequent use of in their way of Living and Conversation, leaving others, which they have but seldom an occasion to mention, loose and without names, that tie them together: they rather chusing to enumerate (when they have need) such *Ideas* as make them up, by the particular names, that stand for them, than

than to trouble their Memories by multiplying of complex *Ideas* with names to them, which they shall seldom or never have any occasion to make use of.

§. 6. This gives us the Reason *how it comes to pass, that there are in every Language words which cannot be rendred by any words of another*. For the several Fashions, Customs, and Manners of one Nation, making several Combinations of *Ideas* familiar and necessary in one, which another People had never any occasion to make, or, perhaps, so much as take notice of, Names come of course to be annexed to them, to avoid long Periphrases in things of daily Conversation; and so they become so many distinct complex *Ideas* in their Minds. Thus *ὀσέγραμμος* amongst the *Greeks*, and *Proscripto* amongst the *Romans*, stood for complex *Ideas*, which were not in the Minds of other People, nor had therefore any names in other Languages that answered them. Where there was no such Custom, there was no notion of any such Actions, no use of such Combinations of *Ideas* as were united, and, as it were, tied together by those terms; and therefore in other Countries there were no names for them.

§. 7. Hence also we may see the Reason, *Why Languages constantly change*, take up new, and lay by old terms. Because change of Customs and Opinions bringing with them new Combinations of *Ideas*, which it is necessary frequently to think on, and talk about, new names to avoid long descriptions are annexed to them; and so they become new Species of complex Modes. What a number of different *Ideas* are by this means wrapped up in one short sound, and how much of our Time and Breath is thereby saved, any one will see, who will but take the pains to enumerate all the *Ideas*, that either *Reprieve* or *Appeal* stand for; and instead of either of those Names, use a Periphrasis to make any one understand their meaning.

§. 8. Though I shall have occasion to consider this more at large, when I come to treat of Words, and their Use; yet I could not avoid to take thus much notice here of the names of *mixed Modes*, which being fleeting, and transient Combinations of simple *Ideas*, which have but a short existence any where, but in the Minds of Men; and there too have no longer any existence, than whilst they are thought on, *have not so much any where the appearance of a constant and lasting existence, as in their Names*; which are therefore, in these sort of *Ideas*, very apt to be taken for the *Ideas* themselves. For if we should enquire where the *Idea* of a Triumph, or Apetheosis exists, it is evident, they could neither of them exist altogether any where in the things themselves, being Actions that required time to their performance, and so could never all exist together: And as to the Minds of Men, where the *Ideas* of these Actions are supposed to be lodged, they have there too a very uncertain existence; and therefore we are apt to annex them to the Names that excite them in us.

§. 9. There are therefore *three ways whereby we get these complex Ideas of mixed Modes*. 1. By Experience and Observation of things themselves. Thus by seeing two Men wrastle, or fence, we get the *Idea* of wrastling or fencing. 2. By Invention, or voluntary putting together of several simple *Ideas* in our own Minds: So he that first invented Printing, or Etching, had an *Idea* of it in his Mind, before it ever existed. 3. Which is the most usual way, by explaining the names of Actions we never saw, or Notions we cannot see; and by enumerating, and thereby, as it were, setting before our Imaginations all those *Ideas* which go to the making them up, and are the constituent parts of them. For having by Sensation and Reflection stored our Minds with simple *Ideas*, and by use got the Names, that

that stand for them, we can by those Names represent to another any complex *Idea*, we could have him conceive: so that it has in it no simple *Idea*, but what he knows, and has, with us, the same name for. For all our complex *Ideas* are ultimately resolvable into simple *Ideas*, of which they are compounded, and originally made up, though perhaps their immediate Ingredients, as I may so say, are also complex *Ideas*. Thus the *mixed Mode*, which the word Lye stands for, is made of these simple *Ideas*: 1. Articulate Sounds. 2. Certain *Ideas* in the Mind of the Speaker. 3. Those words the signs of those *Ideas*. 4. Those signs put together by affirmation or negation, otherwise than the *Ideas* they stand for, are in the Mind of the Speaker. I think I need not go any farther in the Analysis of that complex *Idea*, we call a Lye: what I have said is enough to shew, that it is made up of simple *Ideas*: And it could not but be an offensive tediousness to my Reader, to trouble him with a more minute enumeration of every particular simple *Idea*, that goes to this complex one; which, from what has been said, he cannot but be able to make out to himself. The same may be done in all our complex *Ideas* whatsoever; which however compounded, and decomposed, may at last be resolved into simple *Ideas*, which are all the Materials of Knowledge or Thought we have or can have. Nor shall we have reason to fear, that the Mind is hereby stinted to too scanty a number of *Ideas*, if we consider, what an inexhaustible stock of simple Modes, Number, and Figure alone affords us. How far then *mixed Modes*, which admit of the various Combinations of different simple *Ideas*, and their infinite Modes, are from being few and scanty, we may easily imagine. So that before we have done, we shall see, that, no Body need be afraid, he shall have scope, and compass enough for his Thoughts to range in, though they be, as I pretend, confined only to simple *Ideas* received from Sensation or Reflection, and their several combinations.

§. 10. It is worth our observing which of all our simple *Ideas* have been most modified, and had most *mixed Modes* made out of them, with names given to them: And those have been these three; Thinking, and Motion, (which are the two *Ideas* which comprehend in them all Action,) and Power, from whence these Actions are conceived to flow. These simple *Ideas*, I say, of Thinking, Motion, and Power, have been those, which have been most modified; and out of whose Modifications have been made most complex Modes, with names to them. For Action being the great business of Mankind, and the whole matter about which all Laws are conversant, it is no wonder, that the several Modes of Thinking and Motion, should be taken notice of, the *Ideas* of them observed and laid up in the Memory, and have Names assigned to them; without which, Laws could be but ill made, or Vice and Disorders repressed. Nor could any Communication be well had amongst Men, without such complex *Ideas*, with Names to them; and therefore Men have settled Names, and supposed settled *Ideas* in their Minds, of modes of Actions distinguished by their Causes, Means, Objects, Ends, Instruments, Time, Place, and other circumstances; and also of their Powers fitted for those Actions; v. g. Boldness is the Power to speak or do before others, without fear or disorder; and the Greeks call the confidence of speaking by a peculiar name *παρρησία*: Which power or ability in Man, of doing any thing, when it has been acquired by frequent doing the same thing, is, that the *Idea* we name *Habit*; when it is forward, and ready upon every occasion, to break into Action, we call it *Disposition*: Thus Testiness is a disposition or aptness to be angry..

To conclude, Let us examine any *Modes of Action*, v.g. Consideration and Assent, which are Actions of the Mind ; Running and Speaking, which are Actions of the Body ; Revenge and Murther, which are Actions of both together, and we shall find them but so many *Collections of simple Ideas*, which together make up the complex ones signified by those Names.

§. 11. *Power* being the Source from whence all Action proceeds. The Substances wherein these Powers are, when they exert this Power into Act, are called Causes ; and the Substances which thereupon are produced, or the simple *Ideas* which are introduced into any subject by the exerting of that Power, are called Effects. The efficacy whereby the new Substance or *Idea* is produced, is called, in the subject, exerting that Power, Action ; but in the subject, wherein any simple *Idea* is changed or produced, it is called Passion : which efficacy however various, and the effects almost infinite ; yet we can, I think, conceive it in intellectual Agents, to be nothing else but Modes of Thinking, and Willing, in corporeal Agents, nothing else but Modifications of Motion. I say, I think we cannot conceive it to be any other but these two : For whatever sort of Action, besides these, produces any effects, I confess my self to have no Notion, nor *Idea* of ; and so they are quite remote from my Thoughts, Apprehensions, and Knowledge ; and are as much in the dark to me, as five other Senses, or the *Ideas* of Colours to a blind Man : And therefore many words, which seem to express some Action, signify nothing of the Action, or *Modus Operandi* at all, but barely the effect, with some circumstances of the Subject wrought on, or Cause operating ; v.g. Creation, Annihilation, contain in them no *Idea* of the Action or Manner, whereby they are produced, but barely of the Cause, and the thing done. And when a Country man says, the Cold freezes Water, though the word Freezing seem to import some Action, yet truly it signifies nothing, but the effect, viz. that Water, that was before fluid, is become hard and consistent, without containing any *Idea* of the Action whereby it is done.

§. 12. I think I shall not need to remark here, that though Power and Action make the greatest part of mixed Modes, marked by Names, and familiar in the Minds and Mouths of Men ; yet other simple *Ideas*, and their several Combinations, are not excluded ; much less, I think, will it be necessary for me to enumerate all the mixed Modes, which have been fetled, with Names to them : that would be to make a Dictionary of the greatest part of the Words made use of in Divinity, Ethicks, Law, and Politicks, and several other Sciences. All that is requisite to my present design, is to shew, what sort of *Ideas* those are, I call *Mixed Modes* ; how the Mind comes by them ; and that they are Compositions, made up of simple *Ideas* got from Sensation and Reflection, which, I suppose, I have done.

C H A P. XXIII.

Of our Complex Ideas of Substances.

§. 1. **T**He Mind being, as I have declared, furnished with a great number of the simple *Ideas*, conveyed in by the *Senses*, as they are found in exterior things, or by *Reflection* on its own Operations, takes notice also, that a certain number of these simple *Ideas* go constantly together; which being presumed to belong to one thing, and, Words being suited to common apprehensions, and made use of for quick dispatch, are called so united in one subject, by one name; which by inadvertency we are apt afterward to talk of and consider as one single *Idea*, which indeed is a complication of many *Ideas* together: Because, as I have said, not imagining how these simple *Ideas* can subsist by themselves, we accustom our selves, to suppose some *Substratum*, wherein they do subsist, and from which they do result, which therefore we call *Substance*.

§. 2. So that if any one will examine himself concerning his *Notion of pure Substance in general*, he will find he has no other *Idea* of it at all, but only a Supposition of he knows not what support of such Qualities, which are capable of producing simple *Ideas* in us; which Qualities are commonly called Accidents: And if any one should be asked, what is the subject wherein Colour or Weight inheres, he would have nothing to say, but the solid extended parts: And if he were demanded, what is it, that that Solidity and Extension inhere in, he would not be in a much better case, than the *Indian* before mentioned; who saying that the World was supported by a great Elephant, was asked, what the Elephant rested on; to which his answer was, A great Tortoise: But being again pressed to know what gave support to the broad-back'd Tortoise, replied, something, he knew not what. And thus here, as in all other cases, where we use Words without having clear and distinct *Ideas*, we talk like Children; who being questioned, what such a thing is, which they know not; readily give this satisfactory answer, That is something; which in truth signifies no more when so used, either by Children or Men, but that they knew not what; and that the thing they pretend to know, and talk of, is what they have no distinct *Idea* of at all, and so are perfectly ignorant of it and in the dark. The *Idea* then we have, to which we give the general name Substance, being nothing, but the supposed, but unknown support of those Qualities we find existing, which we imagine cannot subsist, *sine he substantie*, without something to support them, we call that Support *Substantia*; which according to the true import of the Word is, in plain *English*, *standing under*, or *upholding*.

§. 3. An obscure and relative *Idea* of Substance in general being thus made, we come to have the *Ideas of particular sorts of Substances*, by collecting such Combinations of simple *Ideas*, as are by Experience and Observation of Mens Senses taken notice of to exist together, and are therefore supposed to flow from the particular internal Constitution, or unknown Essence of that Substance. Thus we come to have the *Ideas* of a Man, Horse, Gold, Water, &c. of which Substances, whether any one has any other clear *Idea*, farther than of certain simple *Ideas* coexisting together, I appeal to every one's own Experience. 'Tis the ordinary Qualities, observable in Iron, or a Diamond, put together, that make the true com-

complex *Idea* of those Substances, which a Smith, or a Jeweller, commonly knows better than a Philosopher; who, whatever substantial forms he may talk of, has no other *Idea* of those Substances, than what is framed by a collection of those simple *Ideas* are to be found in them; only we must take notice, that our complex *Ideas* of Substances, besides all these simple *Ideas* they are made up of, have always the confused *Idea* of something to which they belong, and in which they subsist: and therefore when we speak of any sort of Substance, we say it is a thing having such or such Qualities, as Body is a thing that is extended, figured, and capable of Motion; a Spirit a thing capable of thinking: and so Hardness, Friability, and Power to draw Iron, we say, are Qualities to be found in a Loadstone. These and, the like fashions of speaking intimate, that the Substance is supposed always something besides the Extension, Figure, Solidity, Motion, Thinking, or other observable *Ideas*, though we know not what it is.

§. 4. Hence when we talk or think of any particular sort of corporeal Substances, as Horse, Stone, &c. though the *Idea*, we have of either of them, be but the Complication, or Collection, of those several simple *Ideas* of sensible Qualities, which we use to find united in the thing called Horse, or Stone, yet because we cannot conceive, how they should subsist alone, nor one in another, we suppose them to exist in, and supported by some common subject; which Support we denote by the name Substance, though it be certain, we have no clear, or distinct *Idea* of that thing, we suppose a Support.

§. 5. The same happens concerning the Operations of the Mind, viz. Thinking, Reasoning, Fearing, &c. which we concluding not to subsist of themselves, nor apprehending how they can belong to Body, or be produced by it, we are apt to think these the Actions of some other Substance, which we call Spirit; whereby yet it is evident, that having no other *Idea* or Notion, of Matter, but something wherein those many sensible Qualities, which affect our Senses, do subsist; by supposing a Substance, wherein *Thinking, Knowing, Doubting*, and a power of *Moving*, &c. do subsist, We have as clear a Notion of the Nature, or Substance of Spirit, as we have of Body; the one being supposed to be (without knowing what it is) the *Substratum* to those simple *Ideas* we have from without; and the other supposed (with a like ignorance of what it is) to be the *Substratum* to those Operations, which we experiment in our selves within. 'Tis plain then, that the *Idea* of corporeal Substance in Matter is as remote from our Conceptions, and Apprehensions, as that of Spiritual Substance, or Spirit: and therefore from our not having any notion of the Substance of Spirit, we can no more conclude its non-Existence, than we can, for the same reason, deny the Existence of Body: It being as rational to affirm, there is no Body, because we cannot know its Essence, as 'tis called, or have no *Idea* of the Substance of Matter; as to say, there is no Spirit, because we know not its Essence, or have no *Idea* of a Spiritual Substance.

§. 6. Whatever therefore be the secret and abstract Nature of Substance in general, all the *Ideas* we have of particular distinct Substances, are nothing but several Combinations of simple *Ideas*, coexisting in such, though unknown, Cause of their Union, as makes the whole subsist of it self. 'Tis by such Combinations of simple *Ideas*, and nothing else, that we represent particular Substances to our selves; such are the *Ideas* we have of their several sorts in our Minds; and such only do we by their specifick Names, signify to others, v. g. Man, Horse, Sun, Water, Iron, upon hearing

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which Words, every one who understands the Language, frames in his Mind a Combination of those several simple *Ideas*, which he has usually observed, or fancied to exist together under that denomination; all which he supposes to rest in, and be, as it were, adherent to that unknown common Subject, which inheres not in any thing else: Though in the mean time it be manifest, and every one, upon Enquiry into his own thoughts, will find, that he has no other *Idea* of any Substance, *v. g.* let it be Gold, Horse, Iron, Man, Vitriol, Bread, but what he has barely of those sensible Qualities, which he supposes to inhere with a supposition of such a *Substratum*, as gives as it were a support to those Qualities, or simple *Ideas*, which he has observed to exist united together. Thus the *Idea* of Sun, What is it, but an aggregate of these several simple *Ideas*, Bright, Hot, Roundish, having a constant regular motion, at a certain distance from us, and, perhaps, some other? As he who thinks and discourses of the Sun, has been more or less accurate, in observing those sensible Qualities, *Ideas*, or Properties, which are in that thing, which he calls the Sun.

§. 7. For he has the perfectest *Idea* of any particular Substance, who has gathered, and put together, most of those simple *Ideas*, which do exist in it, among which are to be reckoned its active Powers, and passive Capacities; which though not strictly simple *Ideas*, yet, in this respect, for brevities sake, may conveniently enough be reckoned amongst them. Thus the power of drawing Iron, is one of the *Ideas* of the Complex one of that substance we call a Load-stone, and a Power to be so drawn is a part of the Complex one we call Iron; which Powers pass for inherent Qualities in those Subjects. Because every Substance, being as apt by the Powers we observe in it, to change some sensible Qualities in other Subjects, as it is to produce in us those simple *Ideas*, we receive immediately from it, does by those new sensible Qualities, introduced into other Subjects, discover to us those Powers, which do thereby mediately affect our Senses, as regularly as its sensible Qualities do it immediately, *v. g.* we immediately by our Senses perceive in Fire its Heat and Colour; which are, if rightly considered, nothing but Powers in it, to produce those *Ideas* in us: We also by our Senses perceive the colour and brittleness of Charcoal; whereby we come by the Knowledge of another Power in Fire, which it has to change the colour and consistency of Wood: By the former Fire immediately, by the later it mediately discovers to us these several Powers; which therefore we look upon to be a part of the Qualities of Fire, and so make them a part of the complex *Ideas* of it. For all those Powers that we take Cognizance of, terminating only in the alteration of some sensible Qualities, in those Subjects, on which they operate, and so making them exhibit to us new sensible *Ideas*, therefore it is, that I have reckoned these Powers amongst the simple *Ideas*, which make the complex ones of the sorts of Substances; though these Powers considered in themselves, are truly complex *Ideas*. And in this looser sense, I crave leave to be understood, when I name any of these *Potentialities amongst the simple Ideas*, which we recollect in our Minds, when we think of particular Substances. For the Powers that are severally in them, are necessarily to be considered, if we will have true distinct Notions of Substances.

§. 8. Nor are we to wonder, that Powers make a great part of our complex *Ideas of Substances*; since their secondary Qualities are those, which in most of them serve principally to distinguish Substances one from another, and commonly make a considerable part of the complex *Idea* of the several sorts of them. For our Senses failing us, in the discovery of the Bulk, Texture, and Figure of the minute parts of Bodies, on which their
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real Constitutions and Differences depend, we are fain to make use of their secondary Qualities, as the characteristical Notes and Marks, whereby to frame *Ideas* of them in our Minds, and distinguish them one from another. All which secondary Qualities, as has been shewn, are nothing but bare Powers. For the Colour and Taste of *Opium*, are, as well as its soporifick or anodyn Virtues, meer Powers depending on its primary Qualities, whereby it is fitted to produce different Operations, on different parts of our Bodies.

The Ideas that make our complex ones of corporeal Substances, are of these three sorts. *First*, The *Ideas* of the primary Qualities of things, which are discovered by our Senses, and are in them even when we perceive them not, such are the Bulk, Figure, Number, Situation, and Motion of the Parts of Bodies, which are really in them, whether we perceive them or no. *Secondly*, The sensible secondary Qualities, which depending on these, are nothing but the Powers, those Substances have to produce several *Ideas* in us by our Senses; which *Ideas* are not in the things themselves, otherwise than as any thing is in its Cause. *Thirdly*, The aptness we consider in any Substance, to give or receive such alterations of primary Qualities, as that the Substance so altered, should produce in us different *Ideas* from what it did before, these are called active and passive Powers: all which Powers, as far as we have any Notice or Notion of them, terminate only in sensible simple *Ideas*; for whatever alteration a Load-stone has the Power to make in the minute Particles of Iron, we should have no Notion of any Power it had at all to operate on Iron, did not its sensible Motion discover it; and I doubt not but there are a thousand Changes, that Bodies we daily handle, have a Power to cause in one another, which we never suspect, because they never appear in sensible effects.

§. 10. Powers therefore, justly make a great part of our complex *Ideas* of Substances. He, that will examine his complex *Idea* of Gold, will find several of its *Ideas*, that make it up, to be only Powers, as the Power of being melted, but of keeping its weight in the Fire, of being dissolved in *Aq. Regia*, are *Ideas*, as necessary to make up our complex *Idea* of Gold, as its Colour and Weight; which if duly considered, are also nothing but different Powers. For to speak truly, Yellowness is not actually in Gold; but is a Power in Gold, to produce that *Idea* in us by our Eyes, when placed in a due Light; and the Heat, which we cannot leave out of our *Idea* of the Sun, is no more really in the Sun, than the white Colour it introduces in Wax. These are both equally Powers in the Sun, operating by the Motion, and Figure of its insensible Parts; so on a Man, as to make him have the *Idea* of Heat; and so on Wax, as to make it capable to produce in a Man the *Idea* of White.

§. 11. Had we Senses acute enough to discern the minute particles of Bodies, and the real Constitution on which their sensible Qualities depend, I doubt not but they would produce quite different *Ideas* in us; and that which is now the yellow Colour of Gold, would then disappear, and instead of it we should see an admirable Texture of parts of a certain Size and Figure. This Microscopes plainly discover to us; for what to our naked Eyes produces a certain Colour, is by thus augmenting the acuteness of our Senses, discovered to be quite a different thing; and the thus altering, as it were, the proportion of the Bulk of the minute parts of a coloured Object to our usual Sight, produces different *Ideas* from what it did before. Thus Sand, or pounded Glass, which is opaque, and white to the naked Eye, is pellucid in a Microscope; and a Hair seen this way, looses its former Colour, and is in a great measure pellucid, with a mixture of some bright sparkling Colours, such as appear from the refraction of

Diamonds, and other pellucid Bodies. Blood to the naked Eye appears all red ; but by a good Microscope, wherein its lesser parts appear, shews only some few Globules of Red, swimming in a pellucid Liquor ; and how these red Globules would appear, if Glasses could be found, that yet could magnifie them 1000, or 10000 times more, is uncertain.

§. 12. The infinitely wise contriver of us, and all things about us, hath fitted our Senses, Faculties, and Organs, to the conveniences of Life, and the Business we have to do here. We are able by our Senses, to know, and distinguish things ; and to examine them so far, as to apply them to our Uses, and several ways accommodate the Exigences of this Life. We have insight enough into their admirable Contrivances, and wonderful Effects, to admire, and magnifie the Wisdom, Power, and Goodness of their Author. Such a Knowledge as this, which is suited to our present Condition, we want not Faculties to attain. But it appears not, that God intended, we should have a perfect, clear, and adequate Knowledge of them : that perhaps is not in the Comprehension of any finite Being. We are furnished with Faculties (dull and weak as they are) to discover enough in the Creatures, to lead us to the Knowledge of the Creator, and the Knowledge of our Duty ; and we are fitted well enough with Abilities, to provide for the Conveniences of living. These are our Business in this World : But were our Senses altered, and made much quicker and acuter, the appearance and outward Scheme of things would have quite another Face to us ; and I am apt to think, would be inconsistent with our Being, or at least well-being in this part of the Universe we inhabit. He that considers, how little our Constitution is able to bear a remove into parts of this Air, not much higher than that we commonly breath in, will have reason to be satisfied, that in this Globe of Earth allotted for our Mansion, the all-wise Architect has suited our Organs, and the Bodies, that are to affect them one to another. If our Sense of Hearing were but 1000 times quicker than it is, how would a perpetual noise distract us ? And we should in the quietest Retirement, be less able to sleep or meditate, than in the middle of a Sea-fight. Nay, if that most instructive of our Senses, Seeing, were in any Man 1000, or 100000 more acute than it is now by the best Microscope, he would see things 1000 or 100000 less than he does now, and so come nearer the Discovery of the Texture and Motion of the minute Parts of corporeal things ; and in many of them, probably get *Ideas* of their internal Constitutions : But then he would be in a quite different World from other People : Nothing would appear the same to him, and others : the visible *Ideas* of every thing would be different. So that I doubt, Whether he, and the rest of Men, could discourse concerning the Objects of Sight ; or have any Communication about Colours, their appearances being so wholly different. And, perhaps, such a quickness and tenderness of Sight could not endure bright Sun-shine, or so much as open Day-light ; nor take in but a very small part of any Object at once, and that too only at a very near distance. And if by the help of such Microscopical Eyes, (if I may so call them,) a Man could penetrate farther than ordinary into the secret Composition, and radical Texture of Bodies, he would not make any great advantage by the change, if such an acute Sight would not serve to conduct him to the Market and Exchange ; if he could not see things, he was to avoid at a convenient distance ; nor distinguish things he had to do with, by those sensible Qualities others do. He that was sharp-sighted enough to see the Configuration of the minute Particles of the Spring of a Clock, and observe upon what peculiar Structure and Impulse, its elastick Motion depends, would no doubt discover something very

very admirable : But if Eyes so framed, could not view at once the Hand, and the Characters of the Hour-plate, and thereby at a distance see what a-Clock it was, their Owner could not be much benefited by that acuteness ; which whilst, it discovered the secret contrivance of the Parts of the Machin, made him loose its use.

§. 13. And here give me leave to propose an extravagant conjecture of mine, *viz.* That since we have some Reason, (if there be any Credit to be given to the report of things, that our Philosophy cannot account for,) to imagine, that Spirits can assume to themselves Bodies of different Bulk, Figure, and Conformation of Parts, Whether one great advantage some of them have over us, may not lie in this, that they can so frame, and shape to themselves Organs of Sensation or Perception, as to suit them to their present Design, and the Circumstances of the Object they would consider. For how much would that Man exceed all others in Knowledge, who had but the Faculty so to alter the Structure of his Eyes, that one Sense, as to make it capable of all the several degrees of Vision, which the assistance of Glasses (casually at at first light on) has taught us to conceive? What wonders would he discover, who could so fit his Eye to all sorts of Objects, as to see when he pleased the Figure and Motion of the minute Particles in the Blood, and other juices of Animals, as distinctly as he does at other times the shape and motion of the Animals themselves. But to us in our present State, unalterable Organs, so contrived, as to discover the Figure and Motion of the minute parts of Bodies, whereon depend those sensible Qualities, we now observe in them, would, perhaps, be of no advantage. God has no doubt made us so, as is best for us in our present Condition. He hath fitted us for the Neighbourhood of the Bodies, that surround us, and we have to do with : And though we cannot by the Faculties we have, attain to a perfect Knowledge of Things ; yet they will serve us well enough for those ends above mentioned, which are our great Concernment. I beg my Reader's Pardon, for laying before him so wild a Phansie, concerning the ways of Conception in Beings above us: But how extravagant soever it be, I doubt whether we can imagine any thing about the Knowledge of Angels, but after this manner, some way or other, in proportion to what we find and observe in our selves. And tho' we cannot but allow, that the infinite Power and Wisdom of God, may frame Creatures with a thousand other Faculties, and ways of perceiving things without them, than what we have : Yet our Thoughts can go no farther than our own, so impossible it is for us to enlarge our very GuesSES beyond the *Ideas* received from our own Sensation and Reflection. The Supposition at least, that Angels do sometimes assume Bodies, need not startle us, since some of the most ancient, and most learned Fathers of the Church, seemed to believe, that they had Bodies: And this is certain, that their state and way of Existence is unknown to us.

§. 14. But to return to the Matter in Hand, the *Ideas* we have of Substances ; and the ways we come by them, I say *our Ideas of Substances* are nothing else but a *Collection of a certain number of simple Ideas, considered as united in one thing.* These *Ideas* of Substances, though they are commonly called simple Apprehensions, and the Names of them simple Terms ; yet in effect, are complex and compounded. Thus the *Idea* which an *English*-man signified by the Name Swan, is white Colour, long Neck, red beak, black Legs, and whole Feet, and all these of a certain size, with a power of swimming in the Water, and making a certain kind of Noise, and, perhaps, to a Man, who has long observed those kind of Birds, some other Properties, which all terminate in sensible simple *Ideas.*

§. 15.

§. 15. Besides the complex *Ideas* we have of material sensible Substances, of which I have last spoken, by the simple *Ideas* we have taken from those Operations of our own Minds, we experiment daily in our selves, as Thinking, Understanding, Willing, Knowing, and power of beginning Motion, &c. coexisting in some Substance, we are able to frame the complex *Idea of a Spirit*. And thus by putting together the *Ideas* of Thinking, Perceiving, Liberty, and power of moving themselves and other things, we have as clear a perception, and notion, of immaterial Substances, as we have of material. For putting together the *Ideas* of Thinking and Willing, or the power of moving or quieting corporeal Motion, joined to Substance, of which we have no distinct *Idea*, we have the *Idea* of Spirit; and by putting together the *Ideas* of coherent solid parts, and a power of being moved, joined with Substance, of which likewise we have no positive *Idea*, we have the *Idea* of Matter. The one is as clear and distinct an *Idea*, as the other: The *Idea* of Thinking, and moving a Body, being as clear and distinct *Ideas*, as the *Ideas* of Extension, Solidity, and being moved. For our *Idea* of Substance, is equally obscure, or none at all, in both; it is but a supposed, I know not what, to support those *Ideas*, we call Accidents.

§. 16. By the complex *Idea* of extended, figured, coloured, and all other sensible Qualities, which is all that we know of it, we are as far from the *Idea* of the Substance of Body, as if we knew nothing at all: Nor after all the acquaintance and familiarity, which we imagine we have with Matter, and the many Qualities Men assure themselves they perceive and know in Bodies, will it, perhaps, upon examination be found, that they have any more, or clearer, primary *Ideas* belonging to Body, than they have belonging to Spirit.

§. 17. The primary *Ideas* we have peculiar to Body, as contradistinguished to Spirit, are the cohesion of solid, and consequently separable parts, and a power of communicating Motion by impulse. These, I think, are the original *Ideas* proper and peculiar to Body: for Figure is but the consequence of finite Extension.

§. 18. The *Ideas* we have belonging, and peculiar to Spirit, are Thinking, and Will, or a power of putting Body into motion by Thought, and, which is consequent to it, Liberty. For as Body cannot but communicate its Motion by impulse, to another Body, which it meets with at rest; so the Mind can put Bodies into Motion, or forbear to do so, as it pleases. The *Ideas* of Existence, Duration, and Mobility, are common to them both.

§. 19. There is no reason why it should be thought strange, that I make Mobility belong to Spirit: For having no other *Idea* of Motion, but change of distance, with other Beings, that are considered as at rest; and finding that Spirits, as well as Bodies, cannot operate, but where they are; and that Spirits do operate at several times, at several places, I cannot but attribute change of place to all finite Spirits: (for of the infinite Spirit, I speak not here.) For my Soul being a real Being, as well as my Body, is certainly as capable of changing of distance with any other Body, or Being, as Body it self; and so is capable of Motion. And if a Mathematician can consider a certain distance, or a change of that distance between two Points; one may certainly conceive a distance, and a change of distance between two Spirits; and so conceive their Motion, their approach, or removal, one from another.

§. 20. Every one finds in himself, that his Soul can think, will, and operate on his Body, in the place where that is; but cannot operate on a Body, or in place, an hundred Miles distant from it. No body can
imagine,

imagine, that his Soul can think, or move a Body at *Oxford*, whilst he is at *London*; and cannot but know, that being united to his Body, it constantly changes place all the whole Journey, between *Oxford* and *London*, as the Coach, or Horse, does that carries him; and, I think, may be said to be truly all that while in motion: Or if that will not be allowed to afford us a clear *Idea* enough of its motion, its being separated from the Body in death, I think, will: For to consider it, to go out of the Body, or leave it, and yet to have no *Idea* of its motion, seems to me impossible.

§. 21. If it be said by any one, that it cannot change place, because it hath none, for Spirits are not *in Loca*, but *Ubi*; I suppose that way of talking, will not now be of much weight to many, in an Age that is not much disposed to admire, or suffer themselves to be deceived, by such unintelligible ways of speaking. But if any one thinks there is any sense in that distinction, and applicable to our present purpose, I desire him to put it into intelligible English; and then from thence draw a reason to shew, that Spirits are not capable of Motion. Indeed, Motion cannot be attributed to GOD, not because he is a Spirit, but because he is an Infinite Spirit.

§. 22. Let us compare then our complex *Idea* of Spirit, with our complex *Idea* of Body, and see whether there be any more obscurity in one, than in the other, and in which most. Our *Idea* of Body, as I think, is an extended solid Substance, capable of communicating Motion by impulse: And our *Idea* of our Souls, is of a Substance that thinks, and has a power of exciting Motion in Body, by Will, or Thought. These, I think, are our complex *Ideas* of Soul and Body, as contradistinguished: and now let us examine which has most obscurity in it, and difficulty to be apprehended. I know that People, whose Thoughts are immersed in Matter, and have so subjected their Minds to their Senses, that they seldom reflect on any thing beyond them, are apt to say, they cannot comprehend a thinking thing, which, perhaps, is true: But I affirm, when they consider it well, they can no more comprehend an extended thing.

§. 23. If any one says, he knows not what 'tis thinks in him; he means, he knows not what the substance is of that thinking thing: No more, say I, knows he what the substance is of that solid thing. Farther, if he says he knows not how he thinks; I answer, Neither knows he how he is extended; how the solid parts of Body are united, or cohere together to make Extension. For though the pressure of the Particles of Air, may account for the cohesion of several parts of Matter, that are grosser than the Particles of Air, and have Pores less than the Corpuscles of Air; yet the weight, or pressure, of the Air, will not explain, nor can be a cause of the coherence of the Particles of Air themselves. And if the pressure of the Æther, or any subtiler Matter than the Air, may unite, and hold fast together, the parts of a Particle of Air, as well as other Bodies; yet it cannot make Bonds for it self, and hold together the parts that make up every the least corpuscle of that *materia subtilis*. So that that Hypothesis, how ingeniously soever explained, by shewing, that the parts of sensible Bodies are held together, by the pressure of other external insensible Bodies, reaches not the parts of the Æther it self; and by how much the more evident it proves, that the parts of other Bodies are held together, by the external pressure of the Æther; and can have no other conceivable cause of their cohesion and union, by so much the more it leaves us in the dark concerning the cohesion of the parts of the Corpuscles of the Æther it self: which we can neither conceive without parts, they being
Bodies,

Bodies and divisible, nor yet how their parts cohere, they wanting that cause of cohesion, which is given of the cohesion of the parts of all other Bodies.

§. 24. But in truth, *the pressure of any ambient Fluid*, how great soever, *can be no intelligible cause of the cohesion of the solid parts of Matter*. For though such a pressure may hinder the avulsion of two polished Surfaces, one from another in a Line perpendicular to them, as in the Experiment of two polished Marbles: Yet it can never, in the least, hinder the separation by a Motion, in a Line parallel to these Surfaces. Because the ambient fluid, having a full liberty to succeed in each point of Space, disordered by a lateral motion, resists such a motion of Bodies so joined, no more, than it would resist the motion of that Body, were it on all sides environed by that Fluid, and touched no other Body: And therefore, if there were no other cause of cohesion, all parts of Bodies must be easily separable by such a lateral sliding motion. For if the pressure of the Aether be the adequate cause of cohesion, where-ever that cause operates not, there can be no cohesion. And since it cannot operate against such a lateral separation, (as has been shewed,) therefore in every imaginary plain, intersecting any mass of Matter, there could be no more cohesion, than of two polished Surfaces; which will always, notwithstanding any imaginable pressure of a Fluid, easily slide one from another: so that, perhaps, how clear an *Idea* soever we think we have of the Extension of Body, which is nothing but the cohesion of solid parts, he that shall well consider it in his Mind, may have reason to conclude, That 'tis as *easy* for him to have a clear *Idea*, how the Soul thinks, as how Body is extended: For since Body is no farther, nor otherwise extended, than by the union and cohesion of its solid parts, we shall very ill comprehend the extension of Body, without understanding wherein consists the union and cohesion of its parts; which seems to me as incomprehensible, as the manner of Thinking, and how it is performed.

§. 25. I allow, it is usual for most People to wonder, how any one should find a difficulty in what they think they every day observe. Do we not see, will they be ready to say; the parts of Bodies stick firmly together? Is there any thing more common? And what doubt can there be made of it? And the like, I say, concerning Thinking, and voluntary Motion: Do we not every moment experiment it in our selves; and therefore can it be doubted? The matter of fact is clear, I confess; but when we would a little nearer look into it, and consider how it is done, there, I think, we are at a loss, both in the one, and the other; and can as little understand how the parts of Body cohere, as how we our selves perceive, or move. I would have any one intelligibly explain to me, how the parts of Gold, or Brass, (that but now in fusion were as loose from one another, as the Particles of Water, or the Sands of an Hour-glass,) come in a few moments to be so united, and adhere so strongly one to another, that the utmost force of Mens arms cannot separate them: A considering Man will, I suppose, be here at a loss, to satisfy his own, or another Man's Understanding.

§. 26. The little Bodies that compose that Fluid, we call Water, are so extremely small, that I have never heard of any one, who by a Microscope, (and yet I have heard of some, that have magnified to 10000; nay, to much above 100,000 times,) pretended to perceive their distinct Bulk, Figure, or Motion: And the Particles of Water, are also so perfectly loose one from another, that the least force sensibly separates them. Nay, if we consider their perpetual motion, we must allow them to have

no cohesion, one with another: and yet let but a sharp cold come, and they unite, they consolidate, these little Atoms cohere, and are not, without great force, separable. He that could find the Bonds, that tie these heaps of loose little Bodies together so firmly; he that could make known the Cement, that makes them stick so fast one to another, would discover a great, and yet unknown Secret: And yet when that was done, would he be far enough from making the extension of Body (which is the cohesion of its solid parts) intelligible, till he could shew wherein consisted the union, or consolidation of the parts of those Bonds, or of that Cement, or of the least Particle of Matter that exists. Whereby it appears that this primary and supposed obvious Quality of Body, will be found, when examined, to be as incomprehensible, as any thing belonging to our Minds; and a *solid extended Substance, as hard to be conceived, as a thinning one*, whatever difficulties some would raise against it.

§. 27. For to extend our Thoughts a little farther, that pressure, which is brought to explain the cohesion of Bodies, is as unintelligible, as the cohesion it self. For if Matter be considered, as no doubt it is; finite, let any one send his Contemplation to the Extremities of Universe, and there see what conceivable Hoops, what Bond he can imagine to hold this mass of Matter, in so close a pressure together; from whence Steel has its firmness, and the parts of a Diamond their hardness and indissolubility. If Matter be finite, it must have its Extrems; and there must be something to hinder it from scattering asunder. If to avoid this difficulty, any one will throw himself into the Supposition and Abyss of infinite Matter, let him consider what light he thereby brings to the cohesion of Body; and whether he be ever the nearer making it intelligible, by resolving it into a Supposition, the most absurd and most incomprehensible of all other: So far is our Extension of Body, (which is nothing but the cohesion of solid parts,) from being clearer, or more distinct; when we would enquire into the Nature, Cause, or Manner of it, than the *Idea* of Thinking.

§. 28. Another *Idea* we have of Body, is the power of *communication of Motion by impulse*; and of our Souls, the power of *exciting of Motion by Thought*. These *Ideas*, the one of Body, the other of our Minds, every days experience clearly furnishes us with: But if here again we enquire how this is done, we are *equally in the dark*. For in the communication of Motion by impulse, wherein as much Motion is lost to one Body, as is got to the other; which is the ordinaryest case, we can have no other conception, but of the passing of Motion out of one Body into another; which, I think, is as obscure and unconceivable, as how our Minds move or stop our Bodies by Thought; which we every moment find they do. The increase of Motion by impulse, which is observed or believed sometimes to happen, is yet harder to be understood. We have by daily experience clear evience of Motion produced both by impulse, and by thought; but the manner how, hardly comes within our comprehension; we are equally at a loss in both. So that however we consider Motion, and its communication either in Body or Spirit, *the Idea which belongs to Spirit, is at least as clear, as that, that belongs to Body*. And if we consider the active power of Moving, or, as I may call it, Motivity, it is much clearer in Spirit than Body: since two Bodies, placed by one another at rest, will never afford us the *Idea* of a power in the one to move the other, but by a borrowed motion: whereas the Mind, every day, affords us *Ideas* of an active power of moving of Bodies; and therefore it is worth our consideration, whether active power be not the proper attribute of Spirits, and passive

power of Matter. But be that as it will, I think, we have as many, and as clear *Ideas* belonging to Spirit, as we have belonging to Body, the Substance of each being equally unknown to us; and the *Idea* of Thinking in Spirit, as clear as of Extension in Body; and the communication of Motion by Thought, which we attribute to Spirit, is as evident, as that by impulse, which we ascribe to Body. Constant Experience makes us sensible of both of these, though our narrow Understandings can comprehend neither. For when the Mind would look beyond these original *Ideas*, we have from Sensation, or Reflection; and penetrate into their Causes, and manner of production, we find still, it discovers nothing but its own short-sightedness.

§. 29. To conclude, Sensation convinces us, that there are solid extended Substances; and Reflection, that there are thinking ones: Experience assures us of the Existence of such Beings; and that the one hath a power to move Body by impulse, the other by thought; this we cannot doubt of. Experience, I say, every moment furnishes us with the clear *Ideas*, both of the one, and the other. But beyond these *Ideas*, as received from their proper Sources, our Faculties will not reach. If we would enquire farther into their Nature, Causes, and Manner, we perceive not the Nature of Extension, clearer than we do of Thinking. If we would explain them any farther, one is as easie as the other: and there is no more difficulty, to conceive how a Substance we know not, should by thought set Body into motion, than how a Substance we know not, should by impulse set Body into motion. So that we are no more able to discover, wherein the *Ideas* belonging to Body consist, than those belonging to Spirit. From whence it seems probable to me, that the simple *Ideas*, we receive from Sensation and Reflection, are the Boundaries of our Thoughts; beyond which, the Mind, whatever efforts it would make, is not able to advance one jot: nor can it make any discoveries, when it would pry into the Nature, and hidden Causes of those *Ideas*.

§. 30. So that, in short, the *Idea* we have of Spirit, compared with the *Idea* we have of Body, stands thus: The substance of Spirit is unknown to us; and so is the substance of Body, equally unknown to us: Two primary Qualities, or Properties of Body, *viz.* solid coherent parts, and impulse, we have distinct clear *Ideas* of: So likewise we know, and have distinct clear *Ideas* of two primary Qualities, or Properties of Spirit, *viz.* Thinking, and a power Action; *i. e.* a power of beginning, or stopping several Thoughts, or Motions. We have also the *Ideas* of several Qualities inherent in Bodies, and have the clear distinct *Ideas* of them: which Qualities, are but the various modifications of the Extension of cohering solid Parts, and their motion. We have likewise the *Ideas* of the several modes of Thinking, *viz.* Believing, Doubting, Intending, Fearing, Hoping; all which, are but the several modes of Thinking. We have also the *Ideas* of Willing, and Moving the Body consequent to it, and with the Body it self too; for, as has been shewed, Spirit is capable of Motion.

§. 31. Lastly, if this Notion of Spirit, may have, perhaps, some difficulties in it, not easie to be explained, we have thereby no more reason to deny, or doubt the existence of Spirits, than we have to deny, or doubt the existence of Body: because the notion of Body is cumbred with some difficulties very hard, and, perhaps, impossible to be explained, or understood by us. For I would fain have instanced any thing in our notion of Spirit more perplexed, or nearer a Contradiction, than the very notion of Body includes in it; the divisibility *in infinitum* of any finite Extension,

Extension, involving us, whether we grant or deny it, in consequences impossible to be explicated, or made consistent ; Consequences that carry greater difficulty, and more apparent absurdity, than any thing can follow from the Notion of an immaterial knowing substance.

§. 32. Which we are not at all to wonder at, since we having but some few superficial *Ideas* of things, discovered to us only by the Senses from without, or by the Mind, reflecting on what it experiments in it self within, have no Knowledge beyond that, much less of the internal Constitution, and true Nature of things, being destitute of Faculties to attain it. And therefore experimenting and discovering in our selves Knowledge, and the power of voluntary Motion, as certainly as we experiment, or discover in things without us, the cohesion and separation of solid Parts, which is the Extension and Motion of Bodies ; *we have as much Reason to be satisfied with our Notion of Spirit, as with our Notion of Body ; and the Existence of the one, as well as the other.* For it being no more a contradiction, that Thinking should exist, separate, and independent from Solidity ; than it is a contradiction, that Solidity should exist separate, and independent from Thinking, they being both but simple *Ideas*, independent one from another ; and having as clear and distinct *Ideas* in us of Thinking, as of Solidity, I know not, why we may not as well allow a thinking thing without Solidity, *i.e. Immaterial*, to exist ; as a solid thing without Thinking, *i.e. Matter*, to exist ; especially since it is no harder to conceive, how Thinking should exist without Matter, than how Matter should think. For whensoever we would proceed beyond these simple *Ideas*, we have from Sensation and Reflection, and dive farther into the Nature of Things, we fall presently into Darkness and Obscurity, Perplexedness and Difficulties ; and can discover nothing farther, but our own Blindness and Ignorance. But which ever of these complex *Ideas* be clearest, that of Body, or Spirit, this is evident, that the simple *Ideas* that make them up, are no other than what we have received from Sensation or Reflection ; and so is it of all our other *Ideas* of Substances, even of God himself.

§. 33. For if we examine the *Idea* we have of the incomprehensible supreme Being, we shall find, that we come by it the same way ; and that the complex *Ideas* we have both of God, and separate Spirits, are made up of the simple *Ideas*, we receive from Reflection ; *v.g.* having from what we experiment in our selves, got the *Ideas* of Existence and Duration ; of Knowledge, and Power ; of Pleasure, and Happiness ; and of several other Qualities and Powers, which it is better to have, than to be without, when we would frame an *Idea* the most suitable we can to the supreme Being, we enlarge every one of these with our *Idea* of Infinity ; and so putting them together, make our complex *Idea* of God. For that the Mind has such a power of enlarging some of its *Ideas*, received from Sensation and Reflection, has been already shewed.

§. 34. If I find, that I know some few things ; and some of them, or all, perhaps, imperfectly, I can frame an *Idea* of knowing twice as many ; which I can double again, as often as I can add to number, and thus enlarge my *Idea* of Knowledge, by extending its Comprehension to all things existing, or possible : The same also I can do of knowing them more perfectly ; *i.e.* all their Qualities, Powers, Causes, Consequences, and Relations, &c. till all be perfectly known, that is in them, or can any way relate to them, and thus frame the *Idea* of infinite or boundless Knowledge : The same may also be done of Power, till we come to that we call infinite ; and also of the Duration of Existence, without beginning or end ; and so frame the *Idea* of an eternal Being : The Degrees or Extent, where-

in we ascribe Existence, Power, Wisdom, and all other Perfection, (which we can have any *Ideas* of) to that Sovereign Being, which we call God, being all boundless and infinite, we frame the best *Idea* of him our Minds are capable of; all which is done, I say, by enlarging those simple *Ideas*, we have taken from the Operations of our own Minds, by reflection; or by our Senses, from exterior things, to that vastness, to which Infinity can extend them.

§. 35. For it is Infinity, which, joined to our *Ideas* of Existence, Power, Knowledge, &c. makes that complex *Idea*, whereby we represent to our selves the best we can, the supreme Being. For though in his own Essence, (which certainly we do not know, not knowing the real Essence of a People, or a Fly, or of our own selves,) God be simple and uncompounded; yet, I think, I may say we have no other *Idea* of him, but a complex one of Existence, Knowledge, Power, Happiness, &c. infinite, and eternal: which are all distinct *Ideas*, and some of them being relative, are again compounded of others; all which being, as has been shewn, originally got from *Sensation* and *Reflection*, go to make up the *Idea* or Notion we have of God.

§. 36. This farther is to be observed, that there is no *Idea* we attribute to God, bating Infinity, which is not also a part of our complex *Idea* of other Spirits. Because being capable of no other simple *Ideas*, belonging to any thing but Body, but those which by reflection we receive from the Operation of our own Minds, we can attribute to Spirits no other, but what we receive from thence: And all the difference we can put between them in our Contemplation of Spirits, is only in the several Extents and Degrees of their Knowledge, Power, Duration, Happiness, &c. For that in our *Ideas*, as well of *Spirits*, as of other things, we are restrained to those we receive from *Sensation* and *Reflection*, is evident from hence, that in our *Ideas* of Spirits, how much soever advanced in Perfection, beyond those of Bodies, even to that of Infinite, we cannot yet have any *Idea* of the manner, wherein they discover their Thoughts one to another: Though we must necessarily conclude, that Spirits, which are Beings, that have perfecter Knowledge, and greater Happiness than we, must needs have also a perfecter way of communicating their Thoughts, than we have, who are fain to make use of corporeal Signs, and particularly Sounds, which are therefore of most general use, as being the best, and quickest we are capable of. But of immediate Communication, having no Experiment in our selves, and consequently, no Notion of it at all, we have no *Idea*, how Spirits, which use not Words, can with quickness, or much less, how Spirits that have no Bodies, can be Masters of their own Thoughts, and communicate, or conceal them at Pleasure, though we cannot but necessarily suppose they have such a Power.

§. 37. And thus we have seen, *what kind of Ideas we have of Substances of all kinds*, wherein they consist, and how we come by them. From whence, I think, it is very evident,

First, That all our *Ideas* of the several sorts of Substances, are nothing but Collections of simple *Ideas*, with a Supposition of something, to which they belong, and in which they subsist; though of this supposed something, we have no clear distinct *Idea* at all.

Secondly, That all the complex *Ideas* we have of Substances, are made up of no other simple *Ideas*, but such, as we have received from *Sensation* or *Reflection*. So that even in those, which we think, we are most intimately acquainted with, and come nearest the Comprehension of, our most enlarged Conceptions, cannot reach beyond those simple *Ideas*. And even

even in those, which seem most remote from all we have to do with, and do infinitely surpass any thing, we can perceive in our selves by *Reflection*, or discover by *Sensation* in other things, we can attain to nothing, but these simple *Ideas*, which we originally received from *Sensation*, or *Reflection*, as is evident in the complex *Ideas* we have of Angels, and particularly of God himself.

Thirdly, That most of the simple *Ideas*, that make up our complex *Ideas* of Substances, when truly considered, are only Powers, however we are apt to take them for positive Qualities; *v. g.* the greatest part of the *Ideas*, that make our complex *Idea* of *Gold*, are *Yellowness*, great *Weight*, *Ductility*, *Fusibility*, and *Solubility*, in *Aq. Regia*, &c. all united together in an unknown *Substratum*; all which *Ideas*, are nothing else, but so many relations to other Substances; and are not really in the *Gold* it self, though they depend on those real, and primary Qualities of its internal constitution, whereby it has a fitness, differently to operate, and be operated on by several other Substances.

C H A P. XXIV.

Of Collective Ideas of Substances.

§. 1. **B**ESIDES these complex *Ideas* of several single Substances, as of *Man*, *Horse*, *Gold*, *Violet*, *Apple*, &c. the Mind hath also complex collective *Ideas* of Substances; which I so call, because such *Ideas* are made up of many particular Substances considered together, as united into one *Idea*, and which so joined, are looked on as one; *v. g.* the *Idea* of such a collection of *Men* as make an *Army*, though consisting of a great number of distinct Substances, is as much one *Idea*, as the *Idea* of a *Man*: And the great collective *Idea* of all Bodies whatsoever signified by the name *World*, is as much one *Idea*, as the *Idea* of any the least Particle of *Matter* in it; it sufficing, to the unity of any *Idea*, that it be considered as one Representation, or Picture, though made up of never so many Particulars.

§. 2. These collective *Ideas* of Substances, the Mind makes by its power of Composition, and uniting severally either simple or complex *Ideas* into one, as it does, by the same Faculty, make the complex *Ideas* of particular Substances, consisting of an aggregate of divers simple *Ideas*, united in one Substance: And as the Mind by putting together the repeated *Ideas* of Unity, makes the collective *Mode*, or complex *Idea* of any number, as a *Score*, or a *Gross*, &c. So by putting together several particular Substances, it makes collective *Ideas* of Substances, as a *Troop*, an *Army*, a *Swarm*, a *City*, a *Fleet*; each of which, every one finds, that he represents to his own Mind, by one *Idea*, in one view; and so under that Notion, considers the Things themselves as perfectly one, as one *Ship*, or one *Atom*. Nor is it harder to conceive, how an *Army* of ten Thousand *Men*, should make one *Idea*, than how a *Man* should make one *Idea*; it being as easie to the Mind, to unite into one, the *Idea* of a great number of *Men*, and consider it as one; as it is to unite into one particular, all the distinct *Ideas*, that make up the composition of a *Man*, and consider them altogether as one

§. 3. Amongst such kind of collective *Ideas*, are to be counted most part of artificial Things, at least such of them as are made up of distinct Substances: And, in truth, if we consider all these collective *Ideas* aright, as *ARMY*, *Constellation*, *Universe*; as they are united into so many single *Ideas*, they are but the artificial Draughts of the Mind, bringing things very remote, and independent one from another, into one view, the better to contemplate, and discourse of them, united into one conception, and signified by one name. For there are no Things so remote, nor so contrary, which the Mind cannot, by this art of Composition, bring into one *Idea*, as is visible in that signified by the name *Universe*.

CHAP. XXV.

Of Relation.

§. 1. **B**ESIDES the *Ideas*, whether simple or complex, that the Mind has of Things, as they are in themselves, there are others it gets from their comparison one with another. The Understanding, in the consideration of any thing, is not confined to that precise Object: It can carry any *Ideas*, as it were, beyond it self, or, at least, look beyond it, to see how it stands in conformity to any other. When the Mind so considers one thing, that it does, as it were, bring it to, and set it by another, and carry its view from one to t'other: This is, as the Words import, *Relation* and *Respect*; and the Denominations given to positive Things, intimating that Respect, and serving as Marks to lead the Thoughts beyond the Subject it self denominated, to something distinct from it, are what we call *Relatives*; and the Things so brought together, *Related*. Thus when the Mind considers *Cajus*, as such a positive Being, it takes nothing into that *Idea*, but what really exists in *Cajus*; v. g. when I consider him, as a Man, I have nothing in my Mind, but the complex *Idea* of the Species, Man: So likewise, when I say, *Cajus* is a white Man, I have nothing but the bare consideration of Man, who hath that white colour. But when I give *Cajus* the name *Husband*, I intimate some other person; and when I give him the name *Whiter*, I intimate some other thing in both cases: my Thought is led to something beyond *Cajus*, and there are two things brought into consideration. And since any *Idea*, whether simple, or complex, may be the occasion, why the Mind thus brings two things together; and, as it were, takes a view of them at once, though still considered as distinct: therefore any of our *Ideas*, may be the foundation of Relation, as in the above-mentioned instance, the Contract, and Ceremony of Marriage with *Sempronia*, is the occasion of the Denomination, or Relation of Husband; and the colour White, the occasion why he is said whiter than Free-stone.

§. 2. These, and the like *Relations*, expressed by relative terms, that have others answering them, with a reciprocal intimation, as Father, and Son; Bigger, and Less; Cause, and Effect, are very obvious to every one, and every Body at first sight perceives the Relation. For Father, and Son; Husband, and Wife, and such other correlative terms, seem so nearly to belong one to another, and, through Custom, do so readily chime, and answer one another in Peoples Memories, that upon the naming of either of them, the Thoughts are presently carried beyond the Thing so named;

named; and no body over-looks, or doubts of a Relation, where it is so plainly intimated. But where Languages have failed to give correlative Names, there the Relation is not always so easily taken notice of. Concubine is, no doubt, a relative Name, as well as Wife; but in Languages where this, and the like Words, have not a correlative term, there People are not so apt to take them to be so, as wanting that evident Mark of Relation, which is between Correlatives, which seem to explain one another, and not to be able to exist but together. Hence it is, that many of those Names, which duly considered, do include evident Relations, have been called External Denominations: But all Names, that are more than empty sounds, must signify some *Idea*, which is either in the thing to which the name is applied; and then it is positive, and is looked on as united to, and existing in the Thing to which the Denomination is given; or else it arises from the respect the Mind finds in it, to something distinct from it, with which it considers it; and then it includes a Relation.

§. 3. Another sort of *relative terms* there is, which are not looked on to be either relative, or so much as external Denominations; which yet, under the form and appearance of signifying something absolute in the Subject, do conceal a tacit, though less observable, Relation; such are the *seemingly positive terms* of Old, Great, Imperfect, &c. whereof I shall have occasion to speak more at large in the following Chapters.

§. 4. This farther may be observed, That the *Ideas* of Relation, may be the same in Men, who have far different *Ideas* of the Things that are related, or that are thus compared; v. g. those who have far different *Ideas* of a Man, may yet agree in the notion of a Father; which is a notion superinduced to the Substance, or Man, and refers only to an act of that thing called Man; whereby it contributed to the Generation of one of his own kind, let Man be what it will.

§. 5. The nature therefore of Relation, consists in the referring, or comparing two things, one to another; from which comparison, one or both comes to be denominated: And if either of those things be removed, or cease to be, the Relation ceases, and the Denomination consequent to it, though the other receive in it self no alteration at all; v. g. *Cajus*, whom I consider to day as a Father, ceases to be so to morrow, only by the death of his Son, without any alteration made in himself; nay, barely by the Mind's changing the Object, to which it compares any thing, the same thing is capable of having contrary Denominations at the same time; v. g. *Cajus*, compared to several Persons, may truly be said to be Older, and Younger; Stronger, and Weaker, &c.

§. 6. Whatsoever doth, or can exist, or be considered as one thing, is positive; and so not only simple *Ideas* and Substances, but Modes also are positive Beings; though the parts, of which they consist, are very often relative one to another: but the whole together considered as one thing, and producing in us the complex *Idea* of one thing; which *Idea* is in our Minds, as one Picture, though an aggregate of divers parts; and under one name, it is a positive or absolute Thing, or *Idea*. Thus a Triangle, though the parts thereof, compared one to another, be *relative*, yet the *Idea* of the whole, is a positive absolute *Idea*. The same may be said of a Family, a Tune, &c. for there can be no Relation, but betwixt two Things, considered as two Things. There must always be in relation two *Ideas*, or Things, either in themselves really separate, or considered as distinct, and then ground or occasion for their comparison.

§. 7. Concerning Relation in general, these things may be considered :

First, That there is *no one thing*, whether simple *Idea*, Substance, Mode, or Relation, or Name of either of them, *which is not capable of almost an infinite number of Considerations*, in reference to other things ; and therefore this makes no small part of Mens Thoughts and Words ; *v. g.* one single Man may at once be concerned in, and sustain all these following *Relations*, and many more, *viz.* Father, Brother, Son, Grandfather, Grandson, Father-in-Law, Son-in-Law, Husband, Friend, Enemy, Subject, General, Judge, Patron, Client, Professor, European, English-man, Islanders, Servant, Master, Possessor, Captain, Superiour, Inferiour, Bigger, Less, Older, Younger, Contemporary, Like, Unlike, &c. to an almost infinite number, he being capable of as many Relations, as there can be occasions of comparing him to other things, with which he may agree, or disagree, or have any respect : For, as I said, Relation is a way of comparing, or considering two things together ; and giving one, or both of them, some appellation from that Comparison, and sometimes giving even the Relation it self a Name.

§. 8. *Secondly*, This farther may be considered concerning Relation, That though it be not contained in the real existence of Things, but something extraneous, and superinduced ; yet the *Ideas* which relative Words stand for, are often clearer, and more distinct, than of those Substances to which they do belong. The Notion we have of a Father, or Brother, is a great deal clearer, and more distinct, than that we have of a Man : Or, if you will, Paternity is a thing whereof 'tis easier to have a clear *Idea*, than of Humanity : And I can much easier conceive what a Friend is, than what GOD. Because the knowledge of one Action, or one simple *Idea*, is oftentimes sufficient to give me the Notion of a Relation : but to the knowing of any substantial Being, an accurate collection of sundry *Ideas* is necessary. A Man, if he compare two things together, can hardly be supposed not to know what it is, wherein he compares them : So that when he compares any Things together, he cannot but have a very clear *Idea* of that Relation. The *Ideas* then of *Relations* are capable at least of being more perfect and distinct in our Minds, than those of Substances : Because it is commonly hard to know all the simple *Ideas*, which are really in any Substance, but for the most part easie enough to know the simple *Ideas* that make up any Relation I think on, or have a Name for ; *v. g.* comparing two Men, in reference to one common Parent, it is very easie to frame the *Ideas* of Brothers, without having yet the perfect *Idea* of a Man. For significant relative Words, as well as others, standing only for *Ideas* ; and those being all either simple, or made up of simple ones, it suffices for the knowing the precise *Idea* the relative term stands for, to have a clear conception of that, which is the foundation of the Relation ; which may be done without having a perfect and clear *Idea* of the thing it is attributed to. Thus having the Notion, that one laid the Egg, out of which the other was hatched, I have a clear *Idea* of the Relation of Dam and Chick, between the two Cassiowaries in St. James's Park ; though, perhaps, I have but a very obscure and imperfect *Idea* of those Birds themselves.

§. 9. *Thirdly*, Though there be a great number of Considerations, wherein Things may be compared one with another, and so a multitude of *Relations*, yet they all terminate in, and are concerned about those simple *Ideas*, either of Sensation or Reflection ; which I think to be the whole Materials of all our Knowledge. To clear this, I shall shew it in the most

most considerable Relations that we have any notion of, and some that seem to be the most remote from *Sense* or *Reflection*; which yet will appear to have their *Ideas* from thence, and that the Notions we have of them, are but certain simple *Ideas*, and so originally derived from *Sense* or *Reflection*.

§. 10. *Fourthly*, That Relation being the considering of one thing with another, which is extrinsical to it, it is evident, that all Words, that necessarily infer, and lead the Mind to any other *Ideas*, than are supposed really to exist in that thing, to which the Word is applied, are *relative Words*; v. g. A Man Black, Merry, Thoughtful, Thirsty, Angry, Extended; these, and the like, are all absolute, because they neither signify nor intimate any thing, but what does, or is supposed really to exist in the Man thus denominated: But Father, Brother, King, Husband, Blacker, Merrier, &c. are Words, which, together with the thing they denominate, imply also something else separate and exterior to the existence of that thing.

§. 11. Having laid down these Premises concerning Relation in general, I shall now proceed to shew, in some instances, how all the *Ideas* we have of Relation are made up, as the others are, only of simple *Ideas*; and that they all, how refined, or remote from *Sense* soever they seem, terminate at last in simple *Ideas*. I shall begin with the most comprehensive Relation, wherein all things that do, or can exist, are concerned; and that is the Relation of Cause and Effect. The *Idea* whereof, how derived from the two Fountains of all our Knowledge, *Sensation* and *Reflection*, I shall in the next place consider.

CHAP. XXVI.

Of Cause and Effect, and other Relations.

§. 1. **I**N the notice, that our Senses take of the constant Vicissitude of Things, we cannot but observe, that several particular, both Qualities, and Substances begin to exist; and that they receive this their Existence, from the due Application and Operation of some other Being. From this Observation, we get our *Ideas* of Cause and Effect. That which produces any simple or complex *Idea*, we denote by the general Name *Cause*; and that which is produced, *Effect*. Thus finding, that in that Substance which we call Wax, Fluidity, which is a simple *Idea*, that was not in it before, is constantly produced by the Application of a certain degree of Heat, we call the simple *Idea* of Heat, in relation to Fluidity in Wax, the Cause of it; and Fluidity the Effect. So also finding that the Substance, Wood, which is a certain Collection of simple *Ideas*, so called, will by the Application of Fire, be turned into another Substance, called Ashes; i. e. another complex *Idea*, consisting of a Collection of simple *Ideas*, quite different from that complex *Idea*, which we call Wood; we consider Fire, in relation to Ashes, as Cause, and the Ashes, as Effect. So that whatever is considered by us, to conduce or operate, to the producing any particular simple *Idea*, or Collection of simple *Ideas*, whether Substance, or Mode, which did not before exist, hath thereby in our Minds the relation of a Cause, and so is denominated by us.

§. 2. Having thus, from what our Senses are able to discover, in the Operations of Bodies on one another, got the Notion of Cause and Effect; viz. That a Cause is that which makes any other thing, either simple *Idea*, Substance, or Mode, begin to be; and an Effect is that, which had its Beginning from some other thing. The Mind finds no great difficulty, to distinguish the several Originals of things into two sorts:

First, When the thing is wholly made new, so that no part thereof did ever exist before; as when a new Particle of Matter doth begin to exist, *in rerum natura*, which had before no Being; and this we call *Creation*.

Secondly, When a thing is made up of Particles, which did all of them before exist, but that very thing, so constituted of pre-existing Particles, which considered altogether make up such a Collection of simple *Ideas*, had not any *Existence* before, as this Man, this Egg, Rose, or Cherry, &c. And this, when referred to a Substance, produced in the ordinary course of Nature, by an internal Principle, but set on work by, and received from some external Agent, or Cause, and working by insensible ways, which we perceive not, we call *Generation*; when the Cause is extrinsical, and the Effect produced by a sensible Separation, or *juxta* Position of discernable Parts, we call it *Making*; and such are all artificial things. When any simple *Idea* is produced, which was not in that Subject before, we call it *Alteration*. Thus a Man is generated, a Picture made, and either of them altered, when any new sensible Quality, or simple *Idea*, is produced in either of them, which was not there before; and the things thus made to exist, which were not there before, are *Effects*; and those things, which operated to the Existence, *Causes*. In which, and all other Cases, we may observe, that the Notion of Cause and Effect, has its rise from *Ideas*, received by Sensation or Reflection; and that this Relation, how comprehensive soever, terminates at last in them. For to have the *Idea* of Cause and Effect, it suffices to consider any simple *Idea*, or Substance, as beginning to exist, by the Operation of some other, without knowing the manner of that Operation.

§. 3. *Time* and *Place*, are also the Foundations of very large Relations, and all finite Beings, at least are concerned in them. But having already shewn in another Place, how we got these *Ideas*, it may suffice here to intimate, that most of the Denominations of things, received from time, are only Relations; thus, when any one says, that Queen *Elizabeth* lived sixty nine, and reigned forty five years; these Words import only the Relation of that Duration to some other, and means no more but this, that the Duration of her Existence was equal to sixty nine, and the Duration of her Government to forty five Annual Revolutions of the Sun; and so are all Words, answering, *how long*. Again, *William* the Conqueror invaded *England* about the year 1070. which means this; that taking the Duration from our Saviour's Time, till now, for one entire great length of time, it shews at what distance this Invasion was from the two Extremes: and so do all Words of time, answering to the Question *when*, which shew only the distance of any point of time, from the Period of a longer Duration, from which we measure, and to which we thereby consider it, as related.

§. 4. There are yet besides those, other Words of time, that ordinarily are thought to stand for positive *Ideas*, which yet will, when considered, be found to be relative, such as are *Young*, *Old*, &c. which include, and intimate the Relation any things has, to a certain length of Duration, whereof we have the *Idea* in our Minds. Thus having settled in our Thoughts

Thoughts the *Idea* of the ordinary Duration of a Man to be seventy years, when we say a Man is *Young*, we mean, that his Age is yet but a small part of that which usually Men attain to: And when we denominate him *Old*, we mean, that his Duration is run out almost to the end of that which Men do not usually exceed. And so 'tis but comparing the particular Age, or Duration of this or that Man, to the *Idea* of that Duration which we have in our Minds, as ordinarily belonging to that sort of Animals: Which is plain, in the application of these Names to other Things; for a Man is called young at twenty years, and very young at seven years old: But yet a Horse we call old at twenty, and a Dog at seven years; because in each of these, we compare their Age to different *Ideas* of Duration which are settled in our Minds, as belonging to these several sorts of Animals, in the ordinary course of Nature. But the Sun, and Stars, though they have outlasted several Generations of Men, we call not old, because we do not know what period GOD hath set to that sort of Beings. This Term belonging properly to those Things, which we can observe in the ordinary course of Things, by a natural decay to come to an end, in a certain period of time; and so have in our Minds, as it were, a Standard, to which we can compare the several parts of their Duration; and by the relation they bear thereunto, call them young, or old; which we cannot therefore do to a Ruby, or a Diamond, things whose usual periods we know not.

§. 5. The *Relation* also that things have to one another, in their *Places* and *Distances*, is very obvious to observe; as Above, Below, a Mile distant from *Charing-Cross*, in *England*, and in *London*. But as in Duration, so in *Extension* and Bulk, there are some *Ideas* that are relative, which we signify by Names, that are thought positive; as *Great*, and *Little*, are truly *Relations*. For here also having, by observation, settled in our Minds the *Ideas* of the Bigness of several Species of Things, from those we have been most accustomed to, we make them, as it were, the Standards whereby to denominate the Bulk of others. Thus we call a great Apple, such an one as is bigger than the ordinary sort of those we have been used to; and a little Horse, such an one as comes not up to the size of that *Idea*, which we have in our Minds, to belong ordinarily to Horses: And that will be a great Horse to a *Welsh*-man, which is but a little one to a *Fleming*; they two having from the different Breed of their Countries, taken several siz'd *Ideas* to which they compare, and in relation to which they denominate their Great, and their Little.

§. 6. So likewise *Weak* and *Strong*, are but relative *Denominations* of Power, compared to some *Idea* we have, at that time, of greater or less Power. Thus when we say a Weak Man, we mean one that has not so much Strength, or Power to move, as usually Men have, or usually those of his size have; which is a comparing his Strength, to the *Idea* we have of the usual Strength of Men, or Men of such a size. The like when we say the Creatures are all weak Things; Weak, there, is but a relative term, signifying the disproportion there is in the Power of GOD, and the Creatures. And so abundance of Words, in ordinary Speech, stand only for Relations, (and, perhaps, the greatest part,) which at first sight, seem to have no such signification: v.g. The Ship has necessary Stores: *Necessary*, and *Stores*, are both relative Words; one having a relation to the accomplishing the thing intended, and the other to future use. All which Relations, how they are confined to, and terminate in *Ideas* derived from *Sensation*, or *Reflection*, is too obvious to need any Explication.

C H A P. XXVII.

Of other Relations.

§. 1. **B**ESIDES the before-mentioned occasions of Time, Place, and Causality of comparing, or referring Things one to another, there are, as I have said, infinite others, some whereof I shall mention.

First, The first I shall name, is some one simple *Idea*; which being capable of Parts or Degrees, affords an occasion of comparing the Subjects wherein it is to one another, in respect of that simple *Idea*, *v. g.* Whiter, Sweeter, Bigger, Equal, More, &c. These Relations depending on the Equality and Excess of the same simple *Idea*, in several Subjects, may be called, if one will, *Proportional*; and that these are only conversant about those simple *Ideas* received from Sensation or Reflection, is so evident, that nothing need be said to evince it.

§. 2. *Secondly*, Another occasion of comparing Things together, or considering one thing, so as to include in that Consideration some other thing, is the circumstances of their origine or beginning; which being not afterwards to be altered, make the Relations, depending thereon, as lasting as the Subjects to which they belong; *v. g.* Father and Son, Brothers, Cousin-Germans, &c. which have their Relations by one Community of Blood, wherein they partake in several degrees; Country-men, *i. e.* those who were born in the same Country, or Tract of Ground; and these I call *natural Relations*: Wherein we may observe, that Mankind have fitted their Notions and Words to the use of common Life, and not to the truth and extent of Things. For 'tis certain, that in reality, the Relation is the same, betwixt the Begetter, and the Begotten, in the several Races of other Animals, as well as Men: But yet 'tis seldom said, This Bull is the Grandfather of such a Calf; or that two Pigeons are Cousin-Germans. It is very convenient, that by distinct Names, these Relations should be observed, and marked out in Mankind, there being occasion, both in Laws and other Communications one with another, to mention and take notice of Men, under these Relations: From whence also arise the Obligations of several Duties amongst Men: Whereas in Brutes, Men having very little or no cause to mind those Relations; they have not thought fit to give them distinct and peculiar Names. This, by the way, may give us some light into the different state and growth of Languages, which being suited only to the convenience of Communication, are proportioned to the Notions Men have, and the commerce of Thoughts familiar amongst them; and not to the reality or extent of Things, nor to the various Respects might be found among them; or the different abstract Considerations might be framed about them. Where they had no philosophical Notions, there they had no Terms to express them: And 'tis no wonder Men should have framed no Names for those Things they found no occasion to discourse of: From whence it is easy to imagine, why, as in some Countries, they may not have so much as the Name for an Horse; and in others, where they are more careful of the Pedigrees of their Horses, than of their own, that there they may have not only Names for particular Horses, but also of their several Relations of Kindred one to another.

§. 3. *Thirdly*, Sometimes the foundation of considering Things, with reference to one another, is some act whereby any one comes by a Moral,

Right,

Right, Power, or Obligation to do something. Thus a General is one that hath power to command an Army; and an Army under a General, is a Collection of armed Men, obliged to obey one Man. A Citizen, or a Burgher, is one who has a Right to certain Privileges in this or that place. All this sort depending upon Mens Wills, or Agreement in Society, I call *Instituted*, or *Voluntary*; and may be distinguished from the natural, in that they are most, if not all of them, some way or other alterable, and separable from the Persons to whom they have sometimes belonged, though neither of the Substances, so related, be destroy'd. Now though these are all reciprocal, as well as the rest; and contain in them a reference of two things, one to the other: yet because one of the two things often wants a relative Name, importing that reference, Men usually take no notice of it, and the Relation is commonly over-look'd, *v.g.* A Patron and Client, are easily allow'd to be Relations: but a Constable, or Dictator, are not so readily, at first hearing, considered as such. Because there is no peculiar Name for those who are under the Command of a Dictator, or Constable, expressing a Relation to either of them; though it be certain, that either of them hath a certain Power over some others; and so is so far related to them, as well as a Patron is to his Client, or General to his Army.

§. 4. *Fourthly*, There is another sort of Relation, which is the Conformity, or Disagreement, Mens voluntary Actions have to a Rule, to which they are referred, and by which they are judged of; which, I think, may be called *Moral Relation*; as being that which denominates our Moral Actions, and deserves well to be examined, there being no part of Knowledge wherein we should be more careful to get clear and distinct *Ideas*, and avoid, as much as may be, Obscurity and Confusion. Humane Actions, when with their various Ends, Objects, Manners, and Circumstances, they are framed into distinct complex *Ideas*, they are, as has been shewed, so many *mixed Modes*, a great part whereof have Names annexed to them. Thus supposing Gratitude to be a readiness to acknowledge and return Kindness received; Polygamy to be the having more Wives than one at once: when we frame these Notions thus in our Minds, we have there so many clear and distinct *Ideas* of mixed Modes. But this is not all concerning our Actions; it is not enough to have clear and distinct *Ideas* of them, and to know what Names belong to such and such Combinations of *Ideas*, as make up the complex *Idea* belonging to such a Name. We have a farther and greater Concernment, and that is, to know whether such Actions so made up, are morally good, or bad.

§. 5. Good and Evil, as has been shewed in another place, are nothing but Pleasure or Pain, or that which occasions or procures Pleasure or Pain to us. *Morally Good and Evil* then, is only the Conformity or Disagreement of our voluntary Actions to some Law, whereby Good or Evil is drawn on us, from the Will and Power of the Law-maker; which Good and Evil, Pleasure or Pain, attending our observance, or breach of the Law, by the Decree of the Law-maker, is that we call *Reward and Punishment*.

§. 6. Of these *Moral Rules*, or *Laws*, to which Men generally refer, and by which they judge of the Rectitude or Pravity of their Actions, there seem to me to be *three sorts*, with their three different Enforcements, or Rewards and Punishments. For since it would be utterly in vain, to suppose a Rule set to the free Actions of Man, without annexing to it some Enforcement of Good and Evil, to determine his Will, we must, wherever we suppose a Law, suppose also some Reward or Punishment annexed to

to that Rule. It would be in vain for one intelligent Being, to set a Rule to the Actions of another, if he had it not in his Power, to reward and punish the compliance with, or deviation from his Rule, by some Good and Evil, that is not the natural product and consequence of the Action it self. For that being a natural Convenience, or Inconvenience, would operate of it self without a Law. This, if I mistake not, is the true nature of all *Law*, properly so called.

§. 7. The *Laws* that Men generally refer their Actions to, to judge of their Rectitude, or Obliquity, seem to me to be these three. 1. The *Divine Law*. 2. The *Civil Law*. 3. The *philosophical Law*, if I may so call it. By the Relation they bear to the first of these, we judge whether our Actions are Sins, or Duties; by the second, whether they be Criminal, or Innocent; and by the third, whether they be Virtues or Vices.

§. 8. *First*, That GOD has given a Law to Mankind, I think, there is no body so brutish as to deny. He has a Right to do it, we are his Creatures: He has Goodness and Wisdom to direct our Actions to that which is best: and he has Power to enforce by Reward and Punishments, of infinite weight and duration, in another Life: for no body can take us out of his hands. By comparing them to this Law, it is, that Men judge of the most considerable *Moral Good* or *Evil* of their Actions; that is, whether as *Duties*, or *Sins*, they are like to procure them happiness, or misery, from the hands of the ALMIGHTY.

§. 9. The Civil Law, the Rule set by the Commonwealth, to the Actions of those who belong to it, is another Rule, to which Men refer their Actions, to judge whether they be *criminal*, or no. This Law no body over-looks: the Rewards and Punishments that enforce it, being ready at hand, and suitable to the Power that makes it, which is the force of the Commonwealth, which is engaged to protect the Lives, Liberties, and Possessions, of those who live according to its Laws, and has power to take away Life, Liberty, or Goods, from him who disobey; which is the punishment of Offences committed against this Law.

§. 10. *Thirdly*, The third, which I call the *philosophical Law*, not because Philosophers make it, but because they have most busied themselves to enquire after it, and talk about it, is the Law of *Vertue*, and *Vice*; which though it be more talked of, possibly, than either of the other, yet how it comes to be established with such Authority as it has, to distinguish and denominate the Actions of Men; and what are the true measures of it, perhaps, is not so generally taken notice of. To comprehend this aright, we must consider, that Men uniting into Politick Societies, though they have resigned up to the Publick the disposing of all their force; so that they cannot employ it against any fellow-Citizen, any farther than the Law of their Country directs: yet they retain still the Power of Thinking well or ill; approving or disapproving the Actions of those they live amongst, and converse with. If therefore we examine it right, we shall find, that the measure of what is every-where called and esteemed *Vertue* and *Vice*, is this approbation or dislike, praise or blame, which, by a secret and tacit Consent, establishes it self in the several Societies, Tribes, and Clubs of Men in the World: whereby several Actions come to find Credit or Disgrace amongst them, according to the Judgment, Maxims, or Fashions of that Place.

§. 11. That this is the common *measure of Vertue and Vice*, will appear to any one, who considers, that though that passes for Vice in one Country, which is counted a Vertue in another, yet every-where Vertue and Praise, Vice and Blame, go together. Vertue is every-where that which

is

is thought Praise-worthy; and nothing else but that, which has the allowance of publick Esteem, is Vertue. Vertue and Praise are so united, that they are called often by the same Name. *Sunt sua præmia Laudi*, says *Virgil*; and so *Cicero*, *nihil habet natura præstantius, quam Honestatem, quam Laudem, quam Dignitatem, quam Decus*, which he tells you, are all Names for the same thing, *Tusc. l. 2.* This is the Language of the Heathen Philosophers, who well understood wherein their Notions of *Vertue* and *Vice* consisted. And though, perhaps, by the different Temper, Education, Fashion, Maximis, or Interest of different sorts of Men it fell out, that what was thought Praise-worthy in one Place, escaped not censure in another; and so in different Societies, *Vertues* and *Vices* were changed: Yet as to the Main, they for the most part kept the same every where. For since nothing can be more natural, than to encourage with Esteem and Reputation, that wherein every one finds his Advantage; and to blame and discountenance the contrary: 'tis no Wonder, that Esteem and Discredit; Vertue and Vice, should in a great measure every where correspond with the unchangeable Rule of Right and Wrong, which the Law of God hath established; there being nothing, that so directly, and visibly secures, and advances the general Good of Mankind in this World, as Obedience to the Laws he has set them, and nothing that breeds such Mischiefs and Confusion, as the neglect of them. And therefore Men, without renouncing all Sense and Reason, and their own Interest, which they are so constantly true to, could not generally mistake, in placing their Commendation and Blame on that side, that really deserved it not. Nay, even those Men, whose Practice was otherwise, failed not to give their Approbation right, few being depraved to that Degree, as not to condemn, at least in others, the Faults they themselves were guilty of: whereby even in the Corruption of Manners, the true Boundaries of the the Law of Nature, which ought to be the Rule of Vertue and Vice, were pretty well preserved. So that even the Exhortations of inspired Teachers, have not feared to appeal to common Repute. *Whatsoever is lovely, whatsoever is of good report, if there be any Vertue, if there be any praise, Eccl. Phil. 4. 8.*

§. 12. If any one shall imagine, that I have forgot my own Notion of a Law, when I make the Law, whereby Men judge of *Vertue* and *Vice*, to be nothing else, but the Consent of private Men, who have not Authority enough to make a Law: Especially wanting that, which is so necessary, and essential to a Law, a Power to enforce it: I think, I may say, that he, who imagines Commendation and Disgrace, not to be strong Motives on Men, to accommodate themselves to the Opinions and Rules of those with whom they converse, seems little skill'd in the Nature, or History of Mankind, the greatest part whereof, he shall find to govern themselves chiefly, if not solely, by this Law of Fashion; and so they do that, which keeps them in Reputation with their Company, little regard the Laws of God, or the Magistrate. The Penalties, that attend the breach of God's Laws, some, nay, perhaps, most Men seldom seriously reflect on: and amongst those that do, many whilst they break the Law, entertain Thoughts of future reconciliation, and making their Peace for such Breaches: And as to the Punishments, due from the Laws of the Common-Wealth, they frequently flatter themselves with the hopes of Impunity. But no Man escapes the Punishment of their Censure and Dislike, who offends against the Fashion and Opinion of the Company he keeps, and would recommend himself to. Nor is there one of ten thousand, who is stiff and insensible enough, to bear up under the constant Dislike, and Condemnation of his own

own Club. He must be of a strange, and unusual Constitution, who can content himself, to live in constant Disgrace and Disrepute with his own particular Society. Solitude many Men have sought, and been reconciled to: But no Body, that has the least Thoughts, or Sense of a Man about him, can live in Society, under the constant Dislike, and ill Opinion of his Familiars, and those he converses with. This is a Burthen too heavy for humane Sufferance: And he must be made up of irreconcilable Contradictions, who can take Pleasure in Company, and yet be insensible of Contempt and Disgrace from his Companions.

§. 13. These Three then, *First*, The Law of God. *Secondly*, the Law of politick Societies. *Thirdly*, the Law of Fashion, or private Censure, are those, to which Men variously compare their Actions: And 'tis by their Conformity to one of these Laws, that they take their measures, when they would judge of their Moral Rectitude, and denominate their Actions good or bad.

§. 14. Whether the Rule, to which, as to a Touch-stone, we bring our voluntary Actions, to examine them by, and try their Goodness, and accordingly to name them; which is, as it were, the Mark of the value we set upon them. Whether, I say, we take that Rule from the Fashion of the Country, or the Will of a Law-maker, the Mind is easily able to observe the Relation any Action hath to it; and to judge, whether the Action agrees, or disagrees with the Rule; and so hath a Notion of *Moral Goodness or Evil*, which is either Conformity, or not Conformity of any Action to that Rule: And therefore, is often called Moral Rectitude. This Rule being nothing but a Collection of several simple *Ideas*, the Conformity thereto is but so ordering the Action, that the simple *Ideas*, belonging to it, may correspond to those, which the Law requires. And thus we see, how Moral Beings and Notions, are founded on, and terminated in these simple *Ideas*, we have received from Sensation or Reflection, besides which, we have nothing at all in our Understandings, to employ our Thoughts about. For Example, let us consider the complex *Idea*, we signify by the Word Murther; and when we have taken it asunder, and examined all the Particulars, we shall find them to amount to a Collection of simple *Ideas*, derived from Reflection or Sensation, *viz.* *First*, From Reflection on the Operations of our own Minds, we have the *Ideas* of Willing, Considering, Purposing before hand, Malice, or wishing Ill to another; and also of Life, or Perception, and Self-motion. *Secondly*, From Sensation, we have the Collection of the simple sensible *Ideas* of a Man, and of some Action, whereby we put an end to that Perception, and Motion in the Man; all which simple *Ideas*, are comprehended in the Word Murther. This Collection of simple *Ideas*, being found by me to agree or disagree, with the Esteem of the Country I have been bred in; and to be held by most Men there, worthy Praise, or Blame, I call the Action vertuous or vitious: If I have the Will of a supreme, invisible Law-maker for my Rule; then, as I supposed the Action commanded, or forbidden by God, I call it Good or Evil, Sin or Duty: and if I compare it to civil Law, the Rule made by the Legislative of the Country, I call it lawful, or unlawful, a Crime, or no Crime. So that whencesoever, we take the Rule of Moral Actions; or by what Standard soever, we frame in our Minds the *Ideas* of Vertues or Vices, they consist only, and are made up of Collections of simple *Ideas*, which we originally received from Sense or Reflection; and their Rectitude or Obliquity, consists in the Agreement or Disagreement, with those Patterns prescribed by some Law.

§. 15. To conceive a Right of *Moral Actions*, we must take notice of them,

them, under this two-fold Consideration. *First*, As they are in themselves each made up of such a Collection of simple *Ideas*. Thus Drunkenness, or Lying, signifie such or such a Collection of simple *Ideas*, which I call mixed Modes; and in this Sense, they are as much *positive absolute Ideas*, as the drinking of a Horse, or speaking of a Parrot. *Secondly*, Our Actions are considered, as Good, Bad, or indifferent: and in this respect, they are *Relative*, it being their Conformity to, or Disagreement with some Rule, that makes them to be regular or irregular, Good or Bad; and so, as far as they are compared with a Rule, and thereupon denominated, they come under Relation. Thus the challenging, and fighting with a Man, as it is a certain positive Mode, or particular sort of Action, by particular *Ideas*, distinguished from all others, is called Duelling; which, when considered, in relation to the Law of God, will deserve the Name Sin; to the Law of Fashion, in some Countries, Valour and Vertue; and to the municipal Laws of some Governments, a capital Crime. In this Case, when the positive Mode has one Name, and another Name as it stands in relation to the Law, the distinction may as easily be observed, as it is in Substances, where one Name, *v. g.* Man, is used to signifie the thing, another, *v. g.* Father, to signifie the Relation.

§. 16. But because, very frequently the positive *Idea* of the Action, and its Moral Relation are comprehended together under one Name, and the same Word made use of, to express both the Mode or Action, and its Moral Rectitude or Obliquity: therefore the Relation it self is less taken notice of; and there is often no *distinction* made between the positive *Idea* of the Action, and the reference it has to rule. By which confusion, of these two distinct Considerations, under one Term, those who yield too easily to the Impressions of Sounds, and are forward to take Names for Things, are often misled in their Judgment of Actions. Thus the taking from another what is his, without his Knowledge or Allowance, is properly called *Stealing*: but that Name, being commonly understood to signifie also the Moral pravity of the Action, and to denote its contrariety to the Law, Men are apt to condemn whatever they hear called *Stealing*, as an ill Action, disagreeing with the Rule of Right. And yet the private taking away his Sword from a Mad-man, to prevent his doing Mischief, though it be properly denominated *Stealing*, as the Name of such a *mixed Mode*: yet when compared to the Law of God; when considered in its relation to that supreme Rule, it is no Sin, or Transgression, though the Name *Stealing* ordinarily carries such an intimation with it.

§. 17. And thus much for the Relation of humane Actions to a Law, which therefore I call Moral Relations.

'Twould make a Volume, to go over all sorts of Relations: 'tis not therefore to be expected, that I should here mention them all. It suffices to our present purpose, to shew by these, what the *Ideas* are, we have of this comprehensive Consideration, call'd *Relation*, which is so *various*, and the Occasions of it so *many*, (as many as there can be of comparing things one to another,) that it is not very easie to reduce it to Rules, or under just Heads. Those I have mentioned, I think, are some of the most considerable, and such, as may serve to let us see, from whence we get our *Ideas* of Relations, and wherein they are founded. But before I quit this Argument, from what has been said, give me Leave to observe,

§. 18. *First*, That It is evident, That all Relation terminates in, and is ultimately founded on those simple *Ideas*, we have got from *Sensation* or *Reflection*: So that all that we have in our Thoughts our selves, (if we think of any thing, or have any meaning,) or would signifie to others, when we

use Words, standing for Relations, is nothing but some simple *Ideas*, or Collections of simple *Ideas*, compared one with another. This is so manifest in that sort called proportional, that nothing can be more. For when a Man says, Honey is sweeter than Wax, it is plain, that his Thoughts in this Relation, terminate in this simple *Idea*, Sweetness, which is equally true of all the rest; though, where they are compounded, or decomposed, the simple *Ideas* they are made up of, are, perhaps, seldom taken notice of. v. g. when the Word Father is mentioned: *First*, There is meant that particular of Species or collective *Idea*, signified by the Word Man; *Secondly*, Those sensible simple *Ideas*, signified by the Word Generation; And, *Thirdly*, The Effects of it, and all the simple *Ideas*, signified by the Word Child. So the Word Friend, being taken for a Man, who loves, and is ready to do good to another, has all those following *Ideas* to the making of it up. *First*, all the simple *Ideas*, comprehended in the Word Man, or intelligent Being. *Secondly*, the *Idea* of Love. *Thirdly*, The *Idea* of Readiness, or Disposition. *Fourthly*, The *Idea* of Action, which is any kind of Thought, or Motion. *Fifthly*, The *Idea* of Good, which signifies any thing that may advance his Happiness; and terminates at last, if examined, in particular simple *Ideas*, of which the Word Good in general, signifies any one; but if removed from all simple *Ideas* quite, it signifies nothing at all: And thus also, all Moral Words terminate at last, though, perhaps, more remotely in a Collection of simple *Ideas*: the immediate signification of Relative Words, being very often other supposed known Relations; which, if traced one to another, still end in simple *Ideas*.

§. 19. *Secondly*, That in Relations, we have for the most part, if not always, as clear a Notion of the Relation, as we have of those simple *Ideas*, wherein it is founded: Agreement or Disagreement, whereon Relation depends, being Things, whereof we have commonly as clear *Ideas*, as of any other-whatsoever: it being but the distinguishing simple *Ideas*, or their Degrees one from another, without which, we could have no distinct Knowledge at all. For if I have a clear *Idea* of Sweetness, Light, or Extension, I have too, of equal or more, or less, of each of these: If I know what it is for one Man to be born of a Woman, viz. *Sempronia*, I know what it is for another Man to be born of the same Woman, *Sempronia*; and so have as clear a Notion of Brothers, as of Births, and, perhaps, clearer. For if I believed, that *Sempronia* digged *Titus* out of the Parsley-Bed, (as they use to tell Children,) and thereby became his Mother; and that afterwards in the same manner, she digged *Cajus* out of the Parsley-Bed, I had as clear a Notion of the Relation of Brothers between them, as if I had all the Skill of a Midwife; the Notion that the same Woman contributed, as Mother, equally to their Births, (though I were ignorant, or mistaken in the manner of it,) being that on which I grounded the Relation; and that they agreed in that Circumstance of Birth, let it be what it will. The comparing them then in their descent from the same Person, without knowing the particular Circumstances of that descent, is enough to found my Notion of their having, or not having the Relation of Brothers. But though the *Ideas* of particular Relations, are capable of being as clear and distinct in the Minds of those, who will duly consider them, as those of mixed Modes, and more determinate than those of Substances; yet the Names belonging to Relation, are often of as doubtful, and uncertain Signification, as those of Substances, or mixed Modes; and much more than those of simple *Ideas*. Because Relative Words, being the Marks of this Comparison, which is made only by Men's Thoughts, and is an

Idea

Idea only in Men's Minds, Men frequently apply them to different Comparisons of Things, according to their own Imaginations, which do not always correspond with those of others using the same Names.

§. 20. *Thirdly*, That in these I call Moral Relations, I have a true Notion of Relation, by comparing the Action with the Rule, whether the Rule be true; or false. For if I measure any thing by a Yard, I know, whether the thing I measure be longer, or shorter, than that supposed Yard; though, perhaps, the Yard I measure by, be not exactly the Standard: Which, indeed, is another Enquiry. For though the Rule be erroneous, and I mistake in it: yet the agreement, or disagreement of that which I compare with it, is evidently known by me; wherein consists my knowledge of Relation. Though measuring by a wrong Rule, I shall thereby be brought to judge amiss of its moral Rectitude; because I have tried it by that which is not the true Rule: but am not mistaken in the relation that Action bears to that Rule I compare it to, which is agreement, or disagreement.

CHAP. XXVIII.

Of Clear and Obscure, Distinct and Confused Ideas.

§. 1. **H**AVING shewed the Original of our *Ideas*, and considered the several sorts of them, as Simple and Complex; and shewed the difference in Complex ones, betwixt those of Modes, Relations, and Substances, all which, I think, is necessary to be done by any one, who would acquaint himself thoroughly with the progress of the Mind, in its Apprehension and Knowledge of Things, it will, perhaps, be thought I have dwelt long enough upon the Examination of *Ideas*. I must, nevertheless, crave leave to offer some few other Considerations concerning them. The first is, That some are *clear*, and others *obscure*; some *distinct*, and others *confused*.

§. 2. Perception of the Mind, being most aptly explained by Words relating to the Sight, we shall best understand what is meant by Clear, and Obscure in our *Ideas*, by reflecting on what we call Clear and Obscure in the Objects of Sight. Light being that which discovers to us visible Objects, we give the name of *Obscure*, to that, which is not placed in a Light, sufficient to discover minutely to us the Figure and Colours, which are observable in it, and which, in a better Light, would be discernable. Thus our *simple Ideas* are *clear*, when they are such as the Objects themselves, from whence they were taken, did, in a well-ordered Sensation or Perception, present them. Whilst the Memory retains them thus, and can produce them so, to the Mind, when-ever it has occasion to consider them, they are *clear Ideas*. So far as they either want any thing of that original Exactness, or have lost any of their first Freshness, and are, as it were, faded or tarnished by Time, so far are they *obscure*. *Complex Ideas*, as they are made up of Simple ones: so they are *clear*, when the *Ideas*, that go to their Composition, are *clear*; and the Number and Order of those Simple *Ideas*, that are the Ingredients of any Complex one, is determinate and certain.

§. 3. The cause of *Obscurity* in simple *Ideas*, seems to be either dull Organs; or very slight and transient Impressions made by the Objects;

or else a weakness in the Memory, not able to retain them as received. For to return again to visible Objects, to help us to apprehend this matter. If the Organs, or Faculties of Perception, like Wax over-hardned with Cold, will not receive the Impression of the Seal, from the usual impulse wont to imprint it; or, like Wax of a temper too soft, will not hold it well, when well imprinted; or else supposing the Wax of a temper fit, but the Seal not applied with a sufficient force, to make a clear Impression: In any of these cases, the print left by the Seal, will be obscure. This I suppose, needs no application to make it plainer.

§. 4. As a clear *Idea* is that whereof the Mind has a full and evident perception, so a *distinct Idea* is that wherein the Mind perceives a difference from all other; and a *confused Idea* is such an one, as is not sufficiently distinguishable from another, from which it ought to be different.

§. 5. If no *Idea* be confused, but such as is not sufficiently distinguishable from another, from which it should be different, it will be hard, may any one say, to find anywhere a confused *Idea*. For let any *Idea* be as it will, it can be no other but such as the Mind perceives it to be, and that very perception, sufficiently distinguishes it from all other *Ideas*, which cannot be other, *i. e.* different, without being perceived to be so. No *Idea* therefore can be undistinguishable from another, from which it ought to be different, unless you would have it different from it self: for from all other, it is evidently different.

§. 6. To remove this difficulty, and to help us to conceive aright, what it is, that makes the confusion, *Ideas* are at any time chargeable with, we must consider, that Things are supposed different enough to have different Names, whereby to be marked, and discoursed of apart, upon any occasion: And there is nothing more evident, than that the greatest part of different Names, are supposed to stand for different Things. Now every *Idea* a Man has, being visibly what it is, and distinct from all other *Ideas*, but it self, that which makes it *confused* is, when it is such, that it may as well be called by another Name, as that which it is expressed by: the difference which keep the Things (to be ranked under those two different Names) distinct, and makes them belong rather to the one, than the other of them, being left out; and so the distinction, which was intended to be kept up by those different Names, is quite lost.

§. 7. The *Defaults* which usually occasion this *Confusion*, I think, are chiefly these following:

First, When any complex *Idea* (for 'tis complex *Ideas* that are most liable to confusion) is made up of too small a number of simple *Ideas*, and such only as are common to other Things, whereby the differences, that make it deserve a different Name, are left out. Thus he, that has an *Idea* made up of barely the simple ones of a Beast with Spots, has but a confused *Idea* of a Leopard, it not being thereby sufficiently distinguished from a Lynx, and several other sorts of Beasts that are spotted. So that such an *Idea*, though it hath the peculiar Name Leopard, is not distinguishable from those designed by the Names Lynx, or Panther, and may as well come under the Name Lynx, as Leopard. How much the custom of defining of Words by general terms, contributes to make the *Ideas* we would express by them, confused and undetermined, I leave others to consider. This is evident, that confused *Ideas* are such as render the Use of Words uncertain, and take away the benefit of distinct Names. When the *Ideas*, for which we used different terms, have not a difference answerable to their distinct Names, and so cannot be distinguished by them, there it is that they are truly confused.

§. 8.

§. 8. *Secondly*, Another default, which makes our *Ideas* confused, is, when though the particulars that make up any *Idea*, are in number enough; yet they are so *jumbled together*, that it is not easily discernable, whether it more belongs to the Name that is given it, than to any other. There is nothing properer to make us conceive this Confusion, than a sort of Pictures usually shewn, as surprizing Pieces of Art, wherein the Colours, as they are laid by the Pencil on the Table itself, mark out very odd and unusual Figures, and have no discernable order in their Position. This Draught, thus made up of parts, wherein no Symmetry nor Order appears, is, in it self, no more a confused Thing, than the picture of a cloudy Sky; wherein though there be as little order of Colours, or Figures to be found, yet no body thinks it a confused Picture. What is it then, that makes it be thought confused, since the want of Symmetry does not: as it is plain it does not; for another Draught made, barely in imitation of this, could not be called confused? I answer, That which makes it be thought confused, is the applying it to some Name, to which it does no more discernably belong, than to some other; *v. g.* when it is said to be the Picture of a Man, or *Cæsar*, then any one with reason counts it confused: because it is not discernable, in that state, to belong more to the name Man, or *Cæsar*, than to the name Baboon, or *Pompey*; which are supposed to stand for different *Ideas*, from those signified by Man, or *Cæsar*. But when a cylindrical Mirrour, placed right, hath reduced those irregular Lines on the Table, into their due order and proportion, then the Confusion ceases, and the Eye presently sees, that it is a Man, or *Cæsar*; *i. e.* that it belongs to those Names; and that it is sufficiently distinguishable from a Baboon, or *Pompey*; *i. e.* from the *Ideas* signified by those Names. Just thus it is with our *Ideas*, which are, as it were, the Pictures of Things. No one of these mental Draughts, however the parts are put together, can be called confused, (for they are plainly discernible as they are,) till it be ranked under some ordinary Name, to which it cannot be discerned to belong, any more than it does to some other Name, of an allowed different signification.

§. 9. *Thirdly*, A third defect that frequently gives the name of Confused, to our *Ideas*, is when any one of them is *uncertain, and undetermined*. Thus we may observe Men, who not forbearing to use the ordinary Words of their Language, till they have learn'd their precise signification, change the *Idea*, they make, this or that term stand for, almost as often as they use it. He that does this, out of uncertainty of what he should leave out, or put into his *Idea* of Church, or Idolatry, every time he thinks of either, and holds not steady to any one precise Combination of *Ideas*, that makes it up, is said to have a confused *Idea* of Idolatry, or the Church: Though this be still for the same reason that the former, *viz.* Because a mutable *Idea* (if we will allow it to be one *Idea*) cannot belong to one Name, rather than another; and so loses the distinction, that distinct Names are designed for.

§. 10. By what has been said, we may observe how much *Names*, as supposed steady signs of Things, and by their difference to stand for, and keep Things distinct, that in themselves are different, are the *occasion* if denominating *Ideas* distinct or confused, by a secret and unobserved reference, the Mind makes of its *Ideas* to such Names. This, perhaps, will be fuller understood, after what I say of Words, in the Third Book, has been read and considered. But without taking notice of such a reference of *Ideas* to distinct Names, as the signs of distinct Things, it will be hard to say what a confused *Idea* is. And therefore when a Man designs, by any Name,

a sort of Things, or any one particular Thing, distinct from all others, the complex *Idea* he annexes to that Name, is the more distinct, the more particular the *Ideas* are, and the greater and more determinate the number and order of them is, whereof it is made up. For the more it has of these, the more has it still of the perceivable differences, whereby it is kept separate and distinct from all *Ideas* belonging to other Names, even those that approach nearest to it, and thereby all confusion with them is avoided.

§. 11. *Confusion*, making it a difficulty to separate two Things that should be separated, *concerns always two Ideas*; and those most, which most approach one another. Whenever therefore we suspect any *Idea* to be confused, we must examine what other it is in danger to be confounded with, or which it cannot easily be separated from, and that will always be found an *Idea* belonging to another Name, and so should be a different Thing, from which yet it is not sufficiently distinct; being either the same with it, or making a part of it, or, at least, as properly call'd by that Name, as the other it is ranked under; and so keeps not that difference from that other *Idea*, which the different Names import.

§. 12. This, I think, is the confusion proper to *Ideas*; which still carries with it a secret reference to Names. At least if there be any other confusion of *Ideas*, this is that which most of all disorders Mens Thoughts and Discourses: *Ideas*, as ranked under Names, being those that for the most part Men reason of within themselves, and always those which they communicate about, with others. And therefore where there are supposed two different *Ideas*, marked by two different Names, which are not as distinguishable as the Sounds that stand for them, there never fails to be confusion: And where any *Ideas* are distinct, as the *Ideas* of those two Sounds they are marked by, there can be between them no confusion. *The way to prevent it*, is to collect and unite into our complex *Idea*, as precisely as is possible, all those Ingredients, whereby it is differenced from others; and to them so united in a determinate number and order, apply steadily the same Name. But this neither accommodating Mens ease or vanity, or serving any design, but that of naked Truth, which is not always the thing aimed at, such exactness, is rather to be wished, than hoped for. And since the loose application of Names, to uncertain, and almost no *Ideas*, serves both to cover our own Ignorance, as well as to perplex and confound others, which goes for Learning and Superiority in Knowledge, it is no wonder that most Men should use it themselves, whilst they complain of it in others. Though yet, I think, no small part of the confusion, to be found in the Notions of Men, might, by care and ingenuity, be avoided; yet I am far from thinking it every-where wilful. Some *Ideas* are so complex, and made up of so many parts, that the Memory does not easily retain the very same precise Combination of simple *Ideas*, under one Name; much less are we able constantly to divine for what precise complex *Idea* such a Name stands in another Man's use of it. From the first of these, follows confusion in a Man's own Reasonings and Opinions within himself; from the latter, frequent confusion in discoursing and arguing with others. But having more at large treated of Words, their Defects and Abuses in the following Book, I shall here say no more of it.

§. 13. Our complex *Ideas* being made up of Collections, and so variety of simple ones, may accordingly be very clear and distinct in one part, and very obscure and confused in another. In a Man who speaks of a *Chiliade-ron*, or a Body of a thousand sides, the *Idea* of the Figure may be very confused, though that of the Number be very distinct: so that he being able

able to discourse, and demonstrate concerning that part of his complex *Idea*, which depends upon the Number of a Thousand, he is apt to think; he has a distinct *Idea* of a *Chiliaëdron*; though it be plain, he has no precise *Idea* of its Figure, so as to distinguish it, by that, from one that has but 999 sides: The not observing whereof, causes no small Error in Men's Thoughts, and confusion in their Discourses.

§. 14. He that thinks he has a distinct *Idea* of the Figure of a *Chiliaëdron*, let him for Trial's-sake take another parcel of the same uniform Matter, viz. Gold, or Wax, of an equal Bulk, and make it into a Figure of 999 sides. He will, I doubt not, be able to distinguish these two *Ideas* one from another by the Number of sides; and reason, and argue distinctly about them, whilst he keeps his Thoughts and Reasoning to that part only of these *Ideas*, which is contained in their Numbers; as that the sides of the one, could be divided into two equal Numbers; and of the other, not, &c. But when he goes about to distinguish them by their Figure, he will there be presently at a loss, and not be able, I think, to frame in his Mind two *Ideas*, one of them distinct from the other, by the bare Figure of these two pieces of Gold; as he could, if the same parcels of Gold were made one into a Cube, the other a Figure of five sides: In which in complete *Ideas*, we are very apt to impose on our selves, and wrangle with others, especially where they have particular and familiar Names. For being satisfied in that part of the *Idea*, which we have clear; and the Name which is familiar to us, being applied to the whole, containing that part also, which is imperfect and obscure, we are apt to use it for that confused part, and draw deductions from it, in the obscure part of its Signification, as confidently as we do from the other.

§. 15. Having frequently in our Mouths the Name *Eternity*, we are apt to think, we have a positive comprehensive *Idea* of it, which is as much as to say, that there is no part of that Duration, which is not clearly contained in our *Idea*. 'Tis true, that he that thinks so, may have a clear *Idea* of Duration; he may also have a very clear *Idea* of a very great length of Duration; he may also have a clear *Idea* of the Comparison of that great one, with still a greater: But it not being possible for him to include in his *Idea* of any Duration, let it be as great as it will, the whole Extent together of a Duration, where he supposes no end, that part of his *Idea*, which is still beyond the Bounds of that large Duration, he represents to his own Thoughts, is very obscure and undetermined. And hence it is, that in Disputes and Reasonings concerning Eternity, or any other *Infinite*, we are very apt to blunder, and involve our selves in manifest Absurdities.

§. 16. In Matter, we have no clear *Ideas* of the smallness of Parts, much beyond the smallest, that occur to any of our Senses: and therefore when we talk of the divisibility of Matter *in infinitum*, though we have clear *Ideas* of Division and Divisibility, and have also clear *Ideas* of Parts, made out of a whole, by Division; yet we have but very obscure, and confused *Ideas* of Corpuscles, or minute Bodies, so to be divided, when by former Divisions, they are reduced to a smallness, much exceeding the perception of any of our Senses: and so all that we have clear, and distinct *Ideas* of, is of what Division in general, or abstractly is, and the Relation of *Totum* and *Pars*; But of the bulk of the Body, to be thus infinitely divided after certain Progressions, I think, we have no clear, nor distinct *Ideas* at all. For I ask any one, Whether taking the smallest Atom of Dust he ever saw, he has any distinct *Idea*, (bating still the Number which concerns not Extension,) betwixt the 100, 000, and the 1000, 000 part of it. Or if he think he can refine his

his *Ideas* to that Degree, without losing sight of them, let him add ten Cyphers to each of those Numbers; for that will bring it no nearer the end of infinite Division, than the first half does. I must confess for my part, I have no clear, distinct *Ideas* of the different Bulk, or Extension of those Bodies, having but a very obscure one of either of them. So that, I think, when we talk of Division of Bodies *in infinitum*, our *Idea* of their distinct Bulks or Extension, which is the Subject and Foundation of Divisions, comes to be confounded, and almost lost in Obscurity. For that *Idea*, which is to represent only Bigness, must be very obscure and confused, which we cannot distinguish from one ten times as big, but only by Number: so that we have clear, distinct *Ideas*, we may say of Ten and One, but no distinct *Ideas* of two such Extensions. 'Tis plain from hence, that when we talk of infinite Divisibility of Body, or Extension, our distinct and clear *Ideas* are only of Numbers: but the clear, distinct *Ideas* of Extension, after some Progress of Division, is quite lost: and of such minute Parts, we have no distinct *Ideas* at all; but it returns, as all our *Ideas* of Infinite do, at last to that of Number always to be added; but thereby never amounts to any distinct *Idea* of actual, infinite Parts. We have, 'tis true, a clear *Idea* of Division, as often as we will think of it: but thereby we have no more a clear *Idea* of infinite Parts in Matter, than we have a clear *Idea* of an infinite Number, by being able still to add new Numbers to any assigned Number we have: endless Divisibility giving us no more a clear and distinct *Idea* of actually infinite Parts, than endless Addibility (if I may so speak) gives us a clear and distinct *Idea* of an actually infinite Number: they both being only in a Power still of increasing the Number, be it already as great as it will. So that of what remains to be added, (wherein consists the Infinity,) we have but an obscure, imperfect, and confused *Idea*; from or about which we can argue, or reason with no Certainty or Clearness, no more than we can in Arithmetick, about a Number of which we have no such distinct *Idea*, as we have of 4 or 100; but only this relative obscure one, that compared to any other, it is still bigger: and we have no more a clear, positive *Idea* of it, when we say or conceive it is bigger, or more than 400, 000, 000, than if we should say, it is bigger than 40, or 4: 4000, 000, 000, having no nearer a proportion to the end of Addition, or Number, than 4. For he that adds only 4 to 4, and so proceeds, shall as soon come to the end of all Addition, as he that adds 400, 000, 000, to 400, 000, 000. And so likewise in Eternity, he that has an *Idea* of but four years, has as much a positive compleat *Idea* of Eternity, as he that has one of 400, 000, 000 of Years: For what remains of Eternity beyond either of these two Numbers of Years, is as clear to the one as the other; *i. e.* neither of them has any clear positive *Idea* of it at all. For he that adds only 4 Years to 4, and so on, shall as soon reach Eternity, as he that adds 400, 000, 000 of Years, and so on; or if he please, doubles the Increase as often as he will: The remaining Abyss being still as far beyond the end of all these Progressions, as it is from the length of a Day, or an Hour. For nothing finite, bears any proportion to infinite; and therefore our *Ideas*, which are all finite, cannot bear any. Thus it is also in our *Idea* of *Extension*, when we increase it by Addition, as well as when we diminish it by Division, and would enlarge our Thoughts to infinite Space. After a few doublings of those *Ideas* of Extension, which are the largest we are accustomed to have, we lose the clear distinct *Idea* of that Space: it becomes a confusedly great one, with a Surplus of still greater; about which, when we would argue, or reason, we shall always find our selves at a loss; confused *Ideas* in our Arguings, and Deductions from them, always leading us into confusion.

CHAP.

C H A P. XXIX.

Of Real and Phantastical Ideas.

§. 1. BESIDES what we have already mentioned, concerning *Ideas*, other Considerations belong to them, in reference to things from whence they are taken, or which they may be supposed to represent; and thus, I think, they may come under a threefold distinction; and are,

First, Either real, or phantastical.

Secondly, Adequate, or inadequate.

Thirdly, True, or false.

First, By *real Ideas*, I mean such as have a Foundation in Nature; such as have a Conformity with the real Being, and Existence of Things, or with their Archetypes. *Phantastical or chymical*, I call such as have no Foundation in Nature, nor have any Conformity with that reality of Being, to which they are tacitly referr'd, as to their Archetypes. If we examine the several sorts of *Ideas* before-mentioned, we shall find, that,

§. 2. *First*, Our *simple Ideas* are all real, all agree to the reality of things. Not that they are all of them the Images, or representations of what does exist, the contrary whereof, in all but the primary Qualities of Bodies, hath been already shewed. But though Whiteness and Coldness are no more in Snow, than Pain is; yet those *Ideas* of Whiteness and Coldness, Pain, &c. being in us the Effects of Powers in Things without us, ordained by our Maker, to produce in us such Sensations; they are real *Ideas* in us, whereby we distinguish the Qualities, that are really in things themselves. For these several Appearances, being designed to be the Marks, whereby we are to know, and distinguish Things we have to do with; our *Ideas* do as well serve us to that purpose, and are as real distinguishing Characters, whether they be only constant Effects, or else exact Resemblances of something in the things themselves: the reality lying in that steady correspondence, they have with the distinct Constitutions of real Beings. But whether they answer to these Constitutions, as to Causes or Patterns, it matters not; it suffices, that they are constantly produced by them. And thus our *simple Ideas* are all real and true, because they answer and agree to those Powers of Things, which produce them in our Minds, that being all that is requisite to make them real, and not fictitious at Pleasure. For in *simple Ideas*, (as has been shewed,) the Mind is wholly confined to the Operation of things upon it; and can make to it self no *simple Idea*, more than what it has received.

§. 3. Though the Mind be wholly passive, in respect of its *simple Ideas*: Yet, I think, we may say, it is not so, in respect of its complex *Ideas*: For those being Combinations of *simple Ideas*, put together, and united under one general Name; 'tis plain, that the Mind of Man uses some kind of Liberty, in forming those complex *Ideas*. How else comes it to pass, that one Man's *Idea* of Gold, or Justice, is different from another's: But because he has put in, or left out of his, some *simple Idea*, which the other has not. The Question then is, Which of these are real, and which barely imaginary Combinations: what Collections agree to the reality of Things, and what not? And to this I say, That

§. 4. *Secondly*, *Mixed Modes and Relations*, having no other reality, but what they have in the Minds of Men, there is nothing more requi-

red to those kind of *Ideas*, to make them real, but that they be so framed, that there be a possibility of existing conformable to them. These *Ideas*, being themselves Archetypes, cannot differ from their Achetypes, and so *cannot be chimerical*, unless any one will jumble together in them inconsistent *Ideas*. Indeed, as any of them have the Names of a known Language assigned to them, by which, he that has them in his Mind, would signify them to others, so barely Possibility of existing is not enough; they must have a Conformity to the ordinary Signification of the Name that is given them, that they may not be thought phantastical: as if a Man would give the Name of Justice to that *Idea*, which common use calls Liberality: But this Phantasticalness relates more to Propriety of Speech, than Reality of *Ideas*. For a Man to be undisturbed in Danger, but sedately to consider what is fittest to be done, and to execute it steadily, is a mixed Mode, or a complex *Idea* of an Action which may exist. But to be undisturbed in Danger, without using ones Reason or Industry, is what is also possible to be; and so is as real an *Idea* as the other. Though the first of these, having the Name *Courage* given to it, may, in respect of that Name, be a right or wrong *Idea*: But the other, whilst it has not a common received Name of any known Language assigned to it, is not capable of any Rectitude or Deformity, being made with no reference to any thing but its self.

§. 5. *Thirdly*, Our complex *Ideas* of *Substances*, being made all of them in reference to Things existing without us, and intended to be Representations of Substances, as they really are, are no farther *real*, than as they are such Combinations of simple *Ideas*, that are really united, and co-exist in Things without us. On the Contrary, those are *phantastical*, which are made up of such Collections of simple *Ideas*, as were really never united, never were found together in any Substance; v. g. a rational Creature, consisting of a Horse's Head, joined to a body of humane shape, or such as the *Centaurs* are described: Or, a Body, yellow, very malleable, fusible, and fixed; but lighter than common Water: Or, an uniform, unorganized Body, consisting as to Sense, all of similar Parts, with Perception and voluntary Motion joined to it. Whether such Substances, as these, can possibly exist, or no, 'tis probable we do not know: But be that as it will, these *Ideas* of Substances, being made conformable to no Pattern existing that we know; and consisting of such Collections of *Ideas*, as no Substance ever shewed us united together, they ought to pass with us for barely imaginary: But much more are those complex *Ideas*, which contain in them any Inconsistency or Contradiction of their Parts.

C H A P. XXX.

Of Adequate and Inadequate Ideas.

§. 1. **O**F our real *Ideas*, some are Adequate, and some are Inadequate. Those I call *Adequate*, which perfectly represent those Archetypes, which the Mind supposes them taken from; which it intends them to stand for; and to which it refers them. *Inadequate Ideas* are such, which are but a partial, or incomplete representation of those Archetypes to which they are referred. Upon which account it is plain,

§. 2. *First*, That all our simple *Ideas* are adequate. Because being nothing but the effects of certain Powers in Things, fitted and ordained by GOD, to produce such Sensations in us, they cannot but be correspondent, and adequate to those Powers: And we are sure they agree to the reality of Things. For if Sugar produce in us the *Ideas* which we call Whiteness, and Sweetness, we are sure there is a power in Sugar to produce those *Ideas* in our Minds, or else they could not have been produced. And so each Sensation answering the Power that operates on any of our Senses, the *Idea* so produced, is a real *Idea*, (and not a fiction of the Mind,) which has no power to produce any simple *Ideas*, and cannot but be adequate, since it ought only to answer that power: and so all simple *Ideas* are adequate. 'Tis true, the Things producing in us these simple *Ideas*, are but few of them denominated by us, as if they were only the causes of them; but as if those *Ideas* were real Beings in them. For though Fire be call'd painful to the Touch, whereby it signified the power of producing in us the *Idea* of Pain: yet it is denominated also Light, and Hot; as if Light, and Heat, were really something in the Fire, more than a power to excite these *Ideas* in us; and therefore are called Qualities: in, or of the Fire. But these being nothing, in truth, but powers to excite such *Ideas* in us, I must, in that sense, be understood, when I speak of secondary Qualities, as being in Things; or of their *Ideas*, as being in the Objects, that excite them in us. Such ways of speaking, though accommodated to the vulgar Notions, without which, one cannot be well understood; yet truly signify nothing, but those Powers, which are in Things, to excite certain Sensations or *Ideas* in us. Since were there no fit Organ to receive the impressions Fire makes on the Sight and Touch; nor a Mind joined to those Organs, to receive the *Ideas* of Light and Heat, by those impressions from the Fire, or the Sun, there would yet be no more Light, or Heat in the World, than there would be Pain, if there were no sensible Creature to feel it, though the Sun should continue just as it is now, and Mount *Ætna* flame higher than ever it did. Solidity, and Extension, and the termination of it, Figure, with Motion and Rest, whereof we have the *Ideas*, would be really in the World as they are, whether there were any sensible Being to perceive them, or no: And therefore those we have reason to look on, as the real modifications of Matter; and such as are the exciting Causes of all our various Sensations from Bodies. But this being an Enquiry not belonging to this place, I shall enter no farther into it, but proceed to shew what complex *Ideas* are adequate, and what not.

§. 3. Secondly, Our complex *Ideas of Modes*, being voluntary Collections of simple *Ideas*, which the Mind puts together, without reference to any real Archetypes, or standing Patterns, existing any where, *are*, and cannot but be *adequate Ideas*. Because they not being intended for Copies of Things really existing, but for Archetypes made by the Mind, to rank and denominate Things by, cannot want any thing; they having each of them that combination of *Ideas*, and thereby that perfection the Mind intended they should: So that the Mind acquiesces in them, and can find nothing wanting. Thus by having the *Idea* of a Figure, with three sides, meeting at three Angles, I have a compleat *Idea*, wherein I require nothing else to make it perfect. That the Mind is satisfied with the perfection of this its *Idea*, is plain, in that it does not conceive, that any Understanding hath, or can have a more compleat or perfect *Idea* of that thing it signifies by the word Triangle, supposing it to exist, than it self has in that complex *Idea* of three Sides, and three Angles: in which is contained all that is, or can be essential to it, or necessary to compleat it, where-ever or howe-ever it exists. But in our *Ideas* of Substances, it is otherwise. For there desiring to copy Things, as they really do exist; and to represent to our selves that Constitution, on which all their Properties depend, we perceive our *Ideas* attain not that Perfection we intend: We find they still want something we should be glad were in them; and so are all inadequate. But mixed Modes and Relations, being Archetypes without Patterns, and so having nothing to represent but themselves, cannot but be adequate, every thing being so to it self. He that at first put together the *Idea* of Danger perceived, absence of disorder from Fear, sedate consideration of what was justly to be done, and executing of that without disturbance, or being deterred by the danger of it, had certainly in his Mind that complex *Idea* made up of that Combination: and intending it to be nothing else, but what it is; nor to have in it any other simple *Ideas*, but what it hath, it could not also but be an adequate *Idea*: and laying this up in his Memory, with the name *Courage* annexed to it, to signify it to others, and denominate from thence any Action he should observe to agree with it, had thereby a Standard to measure and denominate Actions by, as they agreed to it. This *Idea* thus made, and laid up for a Pattern, must necessarily be adequate, being referred to nothing else but it self, nor made by any other Original, but the Good-liking and Will of him, that first made this Combination.

§. 4. Indeed, another coming after, and in Conversation learning from him the word *Courage*, may make an *Idea*, to which he gives that name *Courage*, different from what the first Author applied it to, and has in his Mind, when he uses it. And in this case, if he designs, that his *Idea* in Thinking, should be conformable to the other's *Idea*, as the Name he uses in speaking, is conformable in sound to his, from whom he learned it, his *Idea* may be very wrong, and inadequate. Because in this case, making the other Man's *Idea* the pattern of his *Idea* in thinking, as the other Man's Word, or Sound, is the pattern of his in speaking, his *Idea* is so far defective and inadequate, as it is distant from the Archetype and Pattern he refers it to, and intends to express and signify by the name he uses for it: which name he would have to be a sign of the other Man's *Idea*, (to which, in its proper use, it is primarily annexed,) and of his own, as agreeing to it: to which if his own does not exactly correspond, it is faulty and inadequate.

§. 5. Therefore these *complex Ideas of Modes*, when they are referred by the Mind, and intended to correspond to the *Ideas* in the Mind of some other intelligent Being, expressed by the Names, we apply to them, they *may be* very deficient, wrong, and *inadequate*. Because they agree not to that, which the Mind designs to be their Archetype, and Pattern: In which respect only, any *Idea* of Modes can be wrong, imperfect, or inadequate. And on this account, our *Ideas* of mixed Modes are the most liable to be faulty of any other: but this refers more to proper Speaking than Knowing right.

§. 6. *Thirdly*, What *Ideas we have of Substances*, I have above shewed: Now those *Ideas* have in the Mind a double reference: 1. Sometimes they are referred to a supposed real Essence of each Species of Things. 2. Sometimes they are only design'd to be Pictures and Representations in the Mind, of Things that do exist, by *Ideas* that are discoverable in them. In both which ways, these Copies of their Originals, and Archetypes, are imperfect and *inadequate*.

First, It is usual for Men to make the Names of Substances, stand for Things, as supposed to have certain real Essences, whereby they are of this or that Species: And Names standing for nothing but the *Ideas*, that are in Men's Minds, they must consequently refer their *Ideas* to such real Essences, as to their Archetypes. That Men (especially such as have been bred up in the Learning taught in this part of the World) do suppose certain specifick Essences of Substances, which each Individual in its several kind is made conformable to, and partakes of, is so far from needing proof, that it will be thought strange if any one should do otherwise. And thus they ordinarily apply the specifick Names, they rank particular Substances under, to Things, as distinguished by such specifick real Essences. Who is there almost, who would not take it amiss, if it should be doubted, whether he call'd himself Man, with any other meaning than as having the real Essence of a Man? And yet if you demand, what those real Essences are, 'tis plain Men are ignorant, and know them not. From whence it follows, that the *Ideas* they have in their Minds, being referred to real Essences as Archetypes which are unknown, must be so far from being adequate, that they cannot be supposed to be any representation of them at all. The *complex Ideas* we have of Substances, are, as has been shewed, certain Collections of simple *Ideas*, that have been observed or supposed constantly to exist together. But such a *complex Idea* cannot be the real Essence of any Substance: for then the Properties we discover in that Body, would depend on that *complex Idea*, and be deducible from it, and their necessary connexion with it be known; as all Properties of a Triangle depend on, and, as far as they are discoverable, are deducible from the *complex Idea* of three Lines, including a Space. But it is plain, that in our *complex Ideas* of Substances, are not contained such *Ideas*, on which all the other Qualities, that are to be found in them, do depend. The common *Idea* Men have of Iron, is a Body of a certain Colour, Weight, and Hardness; and a Property that they look on as belonging to it, is malleableness. But yet this Property has no necessary connexion with that *complex Idea*, nor any part of it: and there is no more reason to think, that malleableness depends on that Colour, Weight, and Hardness, than that that Colour, or that Weight, depends on its malleableness. And yet, though we know nothing of these real Essences, there is nothing more ordinary, than that Men should attribute the sorts of Things to such Essences. The particular parcel of Matter which makes the Ring I have on my Finger, is forwardly, by most Men, supposed to have a real Essence, whereby it is Gold,

Gold; and from whence those Qualities flow, which I find in it, *viz.* its peculiar, Colour, Weight, Hardness, Fusibility, Fixedness, and change of Colour upon a slight touch of Mercury, &c. This Essence, from which all these Properties flow, when I enquire into it, and search after it, I plainly perceive I cannot discover: the farthest I can go, is only to presume, that it being nothing but Body, its real Essence, or internal Constitution, on which these Qualities depend, can be nothing but the Figure, Size, and Connexion of its solid Parts; of neither of which, I having any distinct perception at all, I can have no *Idea* of its real Essence, which is the cause that it has that particular shining yellowness; a greater weight than any thing I know of the same bulk; and a fitness to have its Colour changed by the touch of Quicksilver. If any one will say, that the real Essence, and internal Constitution, on which these Properties depend, is not the Figure, Size, and Arrangement or Connexion of its solid Parts, but something else, call'd its particular form; I am farther from having any *Idea* of its real Essence, than I was before. For I have an *Idea* of Figure, Size, and Situation of solid Parts in general, though I have none of the particular Figure, Size, or putting together of Parts, whereby the Qualities above-mentioned are produced; which Qualities I find in that particular parcel of Matter that is on my Finger, and not in another parcel of Matter with which I cut the Pen I write with. But when I am told, that something besides the Figure, Size, and Posture of the solid Parts of that Body, is its Essence, something called substantial form, of that, I confess, I have no *Idea* at all, but only of the sound *Form*: which is far enough from an *Idea* of its real Essence, or Constitution. The like ignorance as I have of the real Essence of this particular Substance, I have also of the real Essence of all other natural ones: Of which Essences, I confess, I have no distinct *Ideas* at all; and I am apt to suppose, others, when they examine their own Knowledge, will find in themselves, in this one point, the same sort of ignorance.

§. 7. Now then, when Men apply to this particular parcel of Matter on my Finger, a general Name already in use, and denominate it *Gold*, Do they not ordinarily, or are they not understood to give it that Name, as belonging to a particular Species of Bodies, having a real internal Essence; by having of which Essence, this particular Substance comes to be of that Species, and to be called by that Name? If it be so, as it is plain it is, the name by which Things are marked, as having that Essence, must be referred primarily to that Essence; and consequently the *Idea* to which that name is given, must be referred also to that Essence, and be intended to represent it: which Essence, since they who so use the Names, know not their *Ideas of Substances* must be all *inadequate* in that respect, as not containing in them that real Essence, which the Mind intends they should.

§. 8. *Secondly*, Those who, neglecting that useless Supposition of unknown real Essences, whereby they are distinguished, endeavour to copy the Substances, that exist in the World, by putting together the *Ideas* of those sensible Qualities, which are found co-existing in them, though they come much nearer a likeness of them, than those who imagine they know not what real specifick Essences: yet they arrive not at perfectly adequate *Ideas* of those Substances, they would thus copy into their Minds: nor do those Copies, exactly and fully, contain all that is to be found in their Archetypes. Because those Qualities, and Powers, of Substances, whereof we make their complex *Ideas*, are so many and various, that no Man's complex *Idea* contains them all. That our abstract *Ideas* of Substances, do

do not contain in them all the simple *Ideas* that are united in the Things themselves, is evident, in that Men do rarely put into their complex *Idea* of any Substance, all the simple *Ideas* they do know to exist in it. Because endeavouring to make the signification of their specifick Names, as clear, and as little cumbersome as they can, they make their specifick *Ideas* of the sorts of Substances, for the most part, of a few of those simple *Ideas* which are to be found in them: But these having no original precedency, or right to be put in, and make the specifick *Idea*, more than others that are left out, 'tis plain that both these ways, *our Ideas of Substances* are deficient, and *inadequate*. The simple *Ideas* whereof we make our complex ones of Substances, are all of them (bating only the Figure and Bulk of some sorts) Powers; which being Relations to other Substances, we can never be sure we know all the Powers that are in any one Body, till we have tried what Changes it is fitted to give to, or receive from other Substances, in their severall ways of application: which being impossible to be tried upon any one Body, much less upon all, it is impossible we should have adequate *Ideas* of any Substance, made up of a Collection of all its Properties.

§. 9. Whosoever first light on a parcel of that sort of Substance, we denote by the word *Gold*, could not rationally take the Bulk and Figure he observed in that lump, to depend on its real Essence; on its internal Constitution. Therefore those never went into his *Idea* of that Species of Body: but its peculiar Colour, perhaps, and Weight, were the first he abstracted from it, to make the complex *Idea* of that Species. Which both, are but Powers; the one to affect our Eyes, after such a manner, and to produce in us that *Idea* we call Yellow; and the other to force upwards any other Body of equal bulk, they being put into a pair of equal Scales, one against another. Another, perhaps, added to these, the *Ideas* of Fusibility and Fixedness, two other passive Powers, in relation to the operation of Fire upon it: Another, its Ductility and Solubility in *Aq. Regia*, two other Powers, relating to the operation of other Bodies, in changing its outward Figure, or Separation of it, into sensible Parts. These, or part of these, put together, usually make the complex *Idea* in Mens Minds, of that sort of Body we call Gold.

§. 10. But no one, who hath considered the Properties of Bodies in general, or this sort in particular, can doubt that this, call'd *Gold*, has infinite other Properties, not contained in that complex *Idea*: Some, who have examined this Species more accurately, could, I believe, enumerate ten times as many Properties in Gold; all of them as inseparable from its internal Constitution, as its Colour, or Weight: And 'tis probable, if any one knew all the Properties, that are by divers Men known of this Metal, there would an hundred times as many *Ideas*, go to the complex *Idea* of Gold, as any one Man yet has in his; and yet that not, perhaps, be the thousandth part of what is to be discovered in it. The changes that that one Body is apt to receive, and make in other Bodies, upon a due application, exceeding far, not only what we know, but what we are apt to imagine. Which will not appear so much a Paradox to any one, who will but consider, how far Men are yet from knowing all the Properties of that one, no very compound Figure, a Triangle, though it be no small numbers that are already by Mathematicians discovered of it.

§. 11. So that all our complex *Ideas of Substances* are imperfect and *inadequate*: which would be so also in mathematical Figures, if we were to have our complex *Ideas* of them, only by collecting their Properties, in reference to other Figures. How uncertain, and imperfect, would our
Ideas

Ideas be of an *Elypsis*, if we had no other *Idea* of it, but some few of its Properties? Whereas having in our plain *Idea*, the whole Essence of that Figure, we from thence discover those Properties, and demonstratively see how they flow, and are inseparable from it.

§. 12. Thus the Mind has three sorts of abstract *Ideas*, or nominal Essences :

First, *Simple Ideas*, which are *ἑκτυπα*, or *Copies*; but yet certainly adequate. Because being intended to express nothing but the power in Things to produce in the Mind such a Sensation, that Sensation, when it is produced, cannot but be the Effect of that Power. So the Paper I write on, having the power, in the Light, (I speak according to the common Notion of Light,) to produce in me the Sensation, which I call White, it cannot but be the Effect of such a Power, in something without the Mind; since the Mind has not the power to produce any such *Idea* in its self, and being meant for nothing else but the Effect of such a Power, that simple *Idea* is real and adequate: the sensation of White, in my Mind, being the Effect of that Power, which is in the Paper to produce it, is perfectly adequate to that Power; or else, that Power would produce a different *Idea*.

Secondly, The complex *Ideas* of Substances are *Εκτυπες*, *Copies* too; but not perfect ones, not adequate: which is very evident to the Mind, in that it plainly perceives, that whatever Collection of simple *Ideas* it makes of any Substance that exists, it cannot be sure, that it exactly answers all that are in that Substance. Since not having tried all the Operations of all other Substances upon it, and found all the Alterations it would receive from, or cause in other Substances, it cannot have an exact adequate Collection of all its active and passive Capacities; and so *not* have an adequate complex *Idea* of the Powers of any Substance existing, and its Relations, which is that sort of complex *Idea* of Substances we have. And, after all, if we could have, and actually had, in our complex *Idea*, an exact Collection of all the secondary Qualities, or Powers of any Substance, we should not yet thereby have an *Idea* of the Essence of that Thing. For since the Powers, or Qualities, that are observable by us, are not the real Essence of that Substance, but depend on it, and flow from it, any Collection whatsoever of these Qualities, cannot be the real Essence of that Thing. Whereby it is plain, that our *Ideas* of Substances are not adequate; are not what the Mind intends them to be. Besides, a Man has no *Idea* of Substance in general, nor knows what Substance is in it self.

§. 14. *Thirdly*, Complex *Ideas* of Modes and Relations, are Originals, and *Archetypes*; are not Copies, nor made after the pattern of any real Existence, to which the Mind intends them to be conformable, and exactly to answer. These being such Collections of simple *Ideas*, that the Mind it self puts together, and such Collections, that each of them contains in it precisely all that the Mind intends it should, they are Archetypes and Essences of Modes that may exist: and so are designed only for, and belong only to such Modes, as when they do exist, have an exact conformity with those complex *Ideas*. The *Ideas* therefore of Modes and Relations, cannot but be adequate.

C H A P. XXXI.

Of True and False Ideas.

§. 1. **T**Hough Truth and Falshood, belong, in Propriety of Speech, only to Propositions; yet *Ideas* are oftentimes termed *true* or *false* (as what Words are there, that are not used with great Latitude, and with some deviation from their strict and proper Significations,) Though, I think, that when *Ideas* themselves are termed true or false, there is still some secret or tacit Proposition, which is the Foundation of that Denomination: as we shall see, if we examine the particular Occasions, wherein they come to be called true or false. In all which, we shall find some kind of Affirmation, or Negation, which is the Reason of that Denomination. For our *Ideas*, being nothing but bare Appearances or Perceptions in our Minds, cannot properly and simply in themselves be said to be *true* or *false*, no more than a single Name of any thing, can be said to be true or false.

§. 2. Indeed, both *Ideas* and Words, may be said to be *true* in a metaphysical Sense of the Word Truth; as all other Things, that any way exist, are said to be true; i.e. really to be such as they exist. Though in Things called true, even in that Sense, there is, perhaps, a secret reference to our *Ideas*, look'd upon as the Standards of that Truth, which amounts to a mental Proposition, though it be usually not taken notice of.

§. 3. But 'tis not in that metaphysical Sense of Truth, which we enquire here, when we examine, whether our *Ideas* are capable of being true or false; but in the more ordinary Acceptation of those Words: And so I say, that the *Ideas* in our Minds, being only so many Perceptions, or Appearances there, none of them are false. The *Idea* of a Centaur, having no more Falshood in it, when it appears in our Minds; than the Name Centaur has Falshood in it, when it is pronounced by our Mouths, or written on Paper. For Truth or Falshood, lying always in some Affirmation, or Negation, Mental or Verbal, our *Ideas* are not capable any of them of being false, till the Mind passes some Judgment on them; that is, affirms or denies something of them.

§. 4. When ever the Mind refers any of its *Ideas* to any thing extraneous to them, they are then capable to be called true or false. Because the Mind in such a reference, makes a tacit Supposition of their Conformity to that Thing: which Supposition, as it happens to be true or false; so the *Ideas* themselves come to be denominated. The most usual Cases wherein this happens, are these following:

§. 5. First, When the Mind supposes any *Idea* it has, conformable to that in other Men's Minds called by the same common Name; v.g. when the Mind intends, or judges its *Ideas* of Justice, Temperance, Religion, to be the same, with what other Men give those Names to.

Secondly, When the Mind supposes any *Idea* it has in it self, to be conformable to some real Existence. Thus the two *Ideas*, of a Man, and a Centaur, supposed to be the *Ideas* of real Substances, are the one true, and the other false; the one having a Conformity to what has really existed; the other not.

Thirdly, When the Mind refers any of its *Ideas* to that real Constitution, and Essence of any thing, whereon all its Properties depend: and thus the greatest part, if not all our *Ideas* of Substances, are false.

§. 6. These Suppositions, the Mind is very apt tacitly to make concerning its own *Ideas*. But yet if we will examine it, we shall find it is chiefly, if not only concerning its abstract complex *Ideas*. For the natural tendency of the Mind being towards Knowledge; and finding if it should proceed by, and dwell upon only particular Things, its Progress would be very slow, and its Work endless: Therefore to shorten its way to Knowledge, and make each Perception the more comprehensive; the first Thing it does, as the Foundation of the easier enlarging its Knowledge, either by Contemplation of the things themselves, that it would know; or conference with others about them, is to bind them into Bundles, and rank them so into sorts, that what Knowledge it gets of any of them, it may thereby with assurance extend to all of that sort; and so advance by larger steps in that which is its great Business, Knowledge. This, as I have elsewhere shewed, is the Reason why we collect Things under comprehensive *Ideas*, with Names annexed to them into *Genera* and *Species*; *i. e.* into kinds, and sorts.

§. 7. If therefore we will warily attend to the Motions of the Mind, and observe what Course it usually takes in its way to Knowledge, we shall, I think, find that the Mind having got any *Idea*, which it thinks it may have use of, either in Contemplation or Discourse; the first Thing it does, is to abstract it, and then get a Name to it; and so lay it up in its Store-house, the Memory, as containing the Essence of a sort of Things, of which that Name is always to be the Mark. Hence it is, that we may often observe, that when any one sees a new Thing of a kind that he knows not, he presently asks what it is, meaning by that Enquiry nothing but the Name. As if the Name carried with it the Knowledge of the Species, or the Essence of it; whereof it is indeed used as the Mark, and is generally supposed annexed to it.

§. 8. But this abstract *Idea*, being something in the Mind between the thing that exists, and the Name that is given to it, it is in our *Ideas*, that both the Rightness of our Knowledge, and the Propriety or Intelligibility of our Speaking consists. And hence it is, that Men are so forward to suppose, that the abstract *Ideas* they have in their Minds, are such as agree to the Things existing without them, to which they are refer'd; and are the same also, to which the Names they give them, do by the Use and Propriety of that Language belong: For without this double Conformity of their *Ideas*, they find, they should both think amiss of Things in themselves, and talk of them unintelligibly to others.

§. 9. First then, I say, That when the Truth of our Ideas is judged of, by the Conformity they have to the Ideas which other Men have, and commonly signify by the same Name, they may be any of them false. But yet simple Ideas are least of all liable to be so mistaken. Because a Man by his Senses, and every Day's Observation, may easily satisfy himself, what the simple Ideas are, which their several Names, that are in common use stand for, they being but few in Number; and such, as if he doubts, or mistakes in, he may easily rectify by the Objects they are to be found in. Therefore it is seldom, that any one mistakes in his Names of simple Ideas; or applies the Name *Red*, to the Idea of Green; or the Name *Sweet*, to the Idea Bitter: Much less are Men apt to confound the Names, belonging to different Senses; and call a Colour, by the Name of a Taste, &c. whereby it is evident, that the simple Ideas, they call by any Name, are commonly the same, that others have and mean, when they use the same Names.

§. 10. *Complex Ideas are much more liable to be false in this respect; and the complex Ideas of mixed Modes, much more than those of Substances:* Because in Substances, (especially those, which the common and unborrowed Names of any Language are applied to,) some remarkable sensible Qualities, serving ordinarily to distinguish one sort from another, easily preserve those, who take any Care in the use of their Words, from applying them to sorts of Substances, to which they do not at all belong. But in mixed Modes, we are much more uncertain, it being not so easy to determine of several Actions; whether they are to be called *Justice*, or *Cruelty*; *Liberality*, or *Prodigality*. And so in referring our *Ideas* to those of other Men, call'd by the same Name, ours may be false; and our *Idea* we call *Justice*, may, perhaps, be that which ought to have another Name,

§. 11. But whether or no our *Ideas* of mixed Modes are more liable than any sort, to be different from those of other Men, which are marked by the same Name: This at least is certain, That *this sort of Falshood is much more familiarly attributed to our Ideas of mixed Modes, than to any other.* When a Man is thought to have a false *Idea* of *Justice*, or *Gratitude*, or *Glory*, it is for no other Reason, but that his agrees not with the *Ideas*, which each of those Names are the Signs of in other Men.

The Reason whereof seems to me to be this, That the abstract Ideas of mixed Modes, being Men's voluntary Combinations of such a precise Collection of simple Ideas; and so the Essence of each Species, being made by Men alone, whereof we have no other sensible Standard, existing any where, but the Name it self, or the definition of that Name: We have nothing else to refer these our Ideas of mixed Modes to as Standards, to which we would conform them, but the Ideas of those, who are thought to use those Names in their most proper Significations; and so as our Ideas conform, or differ from them, they pass for true or false. And thus much concerning the Truth and Falshood of our Ideas, in reference to their Names.

§. 13. *Secondly, As to the Truth and Falshood of our Ideas, in reference to the real Existence of Things, when that is made the Standard of their Truth, none of them can be termed false, but only our complex Ideas of Substances.*

§. 14. *First, Our simple Ideas, being barely such Perceptions, as God has fitted us to receive, and given Power to external Objects to produce in us by established Laws, and Ways, suitable to his Wisdom and Goodness, though incomprehensible to us, their Truth consists in nothing else, but in such Appearances, as are produced in us, and must be suitable to those Powers, he has placed in external Objects, or else they could not be produced in us: And thus answering those Powers, they are what they should be, true Ideas. Nor do they become liable to any Imputation of Falshood, if the Mind (as in most Men I believe it does) judges these Ideas to be in the Things themselves. For God in his Wisdom, having set them as Marks of Distinction in Things, whereby we may be able to discern one Thing from another; and so chuse any of them for our uses, as we have Occasion: It alters not the Nature of our simple Idea, whether we think that the Idea of Blue, be in the Violet it self, or in our Mind only; and only the Power of producing it by the Texture of its Parts, reflecting the Particles of Light, after a certain Manner, to be in the Violet it self. For that Texture in the Object, operating regularly and constantly, producing the same Idea of Blue in us, it serves us to distinguish, by our Eyes, that from any other Thing, whether that distinguishing Mark, as it is really in the*

Violet, be only a peculiar Texture of Parts, or else that very Colour, the *Idea* whereof (which is in us) is the exact resemblance. And it is equally from that Appearance, to be denominated Blue, whether it be that real Colour, or only a peculiar Texture in it, that causes in us that *Idea*: Since the Name Blue notes properly nothing, but that Mark of Distinction, that is in a Violet, discernable only by our Eyes, whatever it consists in, that being beyond our Capacities distinctly to know, and, perhaps, would be of less use to us, if we had Faculties to discern.

§. 15. Neither would it carry any Imputation of Falshood to our simple *Ideas*, if by the different Structure of our Organs, it were so ordered, That the same Object should produce in several Men's Minds different *Ideas* at the same time; v. g. if the *Idea*, that a Violet produced in one Man's Mind by his Eyes, were the same that a Marigold produced in another Man's, and *vice versa*. For since this could never be known: because one Man's Mind could not pass into another Man's Body, to perceive what Appearances were produced by those Organs; neither the *Ideas* hereby, nor the Names, would be at all confounded, or any Falshood be in either. For all Things that had the Texture of a Violet, producing constantly the *Idea*, which he called Blue; and those which had the Texture of a Marigold, producing constantly the *Idea*, which he as constantly called Yellow, whatever those Appearances were in his Mind; he would be able as regularly to distinguish Things for his Use by those Appearances, and understand, and signify those distinctions, marked by the Names Blue and Yellow, as if the Appearances, or *Ideas* in his Mind, received from those two Flowers, were exactly the same with the *Ideas* in other Men's Minds. I am nevertheless very apt to think, that the sensible *Ideas*, produced by any Object in different Men's Minds, are most commonly very near and undiscernably alike. For which Opinion, I think, there might be many Reasons offered; but that being besides my present Business, I shall not trouble my Reader with them; but only mind him, that the contrary Supposition, if it could be proved, is of little use, either for the Improvement of our Knowledge, or Conveniency of Life; and so we need not trouble our selves to examine it.

§. 16. From what has been said concerning our simple *Ideas*, I think, it evident, That our simple *Ideas* can none of them be false, in respect of Things existing without us. For the Truth of these Appearances, or Perceptions in our Minds, consisting, as has been said, only in their being answerable to the Powers in external Objects, to produce by our Senses such Appearances in us: and each of them being in the Mind, such as it is, suitable to the Power that produced it, and which alone it represents, it cannot upon that Account, or as referr'd to such a Pattern, be false. Blue or Yellow, Bitter or Sweet, can never be false *Ideas*, these Perceptions in the Mind, are just such as they are there, answering the Powers appointed by God to produce them; and so are truly what they are, and are intended to be. Indeed the Names may be misapply'd; but that in this respect, makes no Falshood in the *Ideas*: As if a Man ignorant in the *English* Tongue, should call Purple, Scarlet.

§. 17. Secondly, Neither can our complex *Ideas* of Modes, in reference to the Essence of any Thing really existing, be false. Because whatever complex *Idea* I have of any Mode, it hath no reference to any Pattern existing, and made by Nature: it is not supposed to contain in it any other *Ideas*, than what it hath; nor to represent any thing, but such a Complication of *Ideas*, as it does. Thus when I have the *Idea* of such an Action of a Man, who forbears to afford himself such Meat, Drink, and Cloathing, and

and other Conveniencies of Life, as his Riches and Estate will be sufficient to supply, and his station requires, I have no false *Idea*; but such as represents an Action, either as I find, or imagine it; and so is capable of neither Truth, or Falshood. But when I give the name Frugality, or Vertue, to this Action, then it may be called a false *Idea*, if thereby it be supposed to agree with that *Idea*, to which, in propriety of Speech, the name of Frugality doth belong; or to be conformable to that Law, which is the Standard of Vertue and Vice.

§. 18. *Thirdly*, Our complex *Ideas of Substances*, being all referred to *Patterns in Things themselves*, may be false. That they are all false, when looked upon as the Representations of the unknown Essences of Things, is so evident, that there needs nothing to be said of it. I shall therefore pass over that chimerical Supposition, and consider them as Collections of simple *Ideas* in the Mind, taken from Combinations of simple *Ideas* existing together constantly in Things, of which Patterns, they are the supposed Copies: And in this reference of them, to the existence of Things, they are false *Ideas*: 1. When they put together simple *Ideas*, which in the real Existence of Things, have no union; as when to the Shape, and Size, that exist together in a Horse, is joined, in the same complex *Idea*, the power of Barking like a Dog: Which three *Ideas*, however put together into one in the Mind, were never united in Nature; and this therefore may be called a false *Idea* of an Horse. 2. *Ideas of Substances* are, in this respect, also false, when from any Collection of simple *Ideas*, that do always exist together, there is separated, by a direct Negation, any other simple *Idea*, which is constantly joined with them. Thus if to Extension, Solidity, Fusibility, the peculiar Weightiness and yellow Colour of Gold, any one join in his Thoughts the Negation of a greater degree of fixedness, than is in Lead, or Copper; he may be said to have a false complex *Idea*, as well as when he joins to those other simple ones, the *Idea* of perfect absolute Fixedness: for either way, the complex *Idea* of Gold being made up of such simple ones, as have no union in Nature, may be termed false. But if he leave out of this his complex *Idea*, that of Fixedness quite, without either actually joining to, or separating of it from the rest in his Mind, it is, I think, to be looked on, as an inadequate and imperfect *Idea*, rather than a false one: since though it contains not all the simple *Ideas* that are united in Nature, yet it puts none together, but what do really exist together.

§. 19. Though in compliance with the ordinary way of Speaking, I have shewed in what sense, and upon what ground our *Ideas* may be sometimes called true, or false; yet if we will look a little nearer into the matter in all cases, where any *Idea* is call'd true, or false, it is from some Judgment that the Mind makes, or is supposed to make, that is true, or false. For *Truth, or Falshood*, being never without some Affirmation, or Negation, Express, or Tacit, it is not to be found, but where signs are joined or separated, according to the agreement, or disagreement, of the Things they stand for. The signs we chiefly use, are either *Ideas*, or Words; wherewith we make either mental, or verbal Propositions. Truth lies in so joining, or separating these Representatives, as the Things they stand for, do, in themselves, agree, or disagree: and Falshood in the contrary, as shall be more fully shewed hereafter.

§. 20. Any *Idea* then we have in our Minds, whether conformable, or not, to the existence of Things, or to any *Ideas* in the Minds of other Men, cannot properly for this alone be called false. For these Representations, if they have nothing in them, but what is really existing in Things

Things without, cannot be thought false, being exact Representations of something: nor yet if they have any thing in them, differing from the reality of Things, can they properly be said to be false Representations, or *Ideas* of Things, they do not represent. But the mistake and falshood is,

§. 21. *First*, When the Mind having any *Idea*, it judges and concludes it the same, that is in other Mens Minds, signified by the same name; or that it is conformable to the ordinary received signification, or definition of that Word, when indeed it is not: Which is the most usual mistake in mixed Modes, though other *Ideas* also are liable to it.

§. 22. *Secondly*, When it having a complex *Idea* made up of such a Collection of simple ones, as Nature never puts together, it judges it to agree to a Species of Creatures really existing; as when it joins the weight of Tin, to the colour, fusibility, and fixedness of Gold.

§. 23. *Thirdly*, When in its complex *Idea*, it has united a certain number of simple *Ideas*, that do really exist together in some sorts of Creatures, but has also left out others, as much inseparable, it judges this to be a perfect compleat *Idea*, of a sort of things which really it is not; v. g. having joined the *Ideas* of substance, yellow, malleable, most heavy, and fusible, it takes that complex *Idea* to be the compleat *Idea* of Gold, when yet its peculiar fixedness and solubility in *Aqua Regia* are as inseparable from those other *Ideas*, or Qualities of that Body, as they are one from another.

§. 24. *Fourthly*, The Mistake is yet greater, when I judge, that this complex *Idea*, contains in it the real Essence of any Body existing; when at least it contains but some few of those Properties, which flow from its real Essence and Constitution. I say, only some few of those Properties; for those Properties consisting mostly in the active and passive Powers, it has, in reference to other Things, all that are vulgarly known of any one Body; and of which the complex *Idea* of that kind of Things is usually made, are but a very few, in comparison of what a Man, that has several ways tried and examined it, knows of that one sort of Things; and all that the most expert Man knows, are but few, in comparison of what are really in that Body, and depend on its internal or essential Constitution. The essence of a Triangle, lies in a very little compass, consists in a very few *Ideas*; three Lines meeting at three Angles, make up that Essence: But the Properties that flow from this Essence, are more than can be easily known, or enumerated. So I imagine it is in Substances their real Essences lie, in a little compass; though the Properties flowing from that internal Constitution, are endless.

§. 25. To conclude, a Man having no notion of any Thing without him, but by the *Idea* he has of it in his Mind; which *Idea*, he has a power to call by what Name he pleases, he may, indeed, make an *Idea* neither answering the reality of Things, nor agreeing to the *Ideas* commonly signified by other Peoples Words; but cannot make a wrong, or false *Idea* of a Thing, which is no otherwise known to him, but by the *Idea* he has of it. v. g. When I frame an *Idea* of the Legs, Arms, and Body of a Man, and join to this a Horse's Head and Neck, I do not make a false *Idea* of any thing; because it represents nothing without me. But when I call it a Man, or Tartar, and imagine it either to represent some real Being without me, or to be the same *Idea*, that others call by the same name; in either of these cases, I may err. And upon this account it is, that it comes to be termed a false *Idea*; though, indeed, the falshood lie not in the *Idea*, but in that tacit mental Proposition, wherein a conformity

formity and resemblance is attributed to it, which it has not. But yet, if having framed such an *Idea* in my Mind, without thinking, either that Existence, or the name Man, or Tartar, belongs to it, I will call it Man, or Tartar, I may be justly thought phantastical in the Naming; but not erroneous in my Judgment; nor the *Idea* any way false.

§. 26. Upon the whole matter, I think, That our *Ideas*, as they are considered by the Mind, either in reference to the proper signification of their Names; or in reference to the reality of Things, *may* very fitly be called *right, or wrong Ideas*, according as they agree, or disagree to those Patterns to which they are referred. But if any one had rather call them true, or false, 'tis fit he use a liberty, which every one has, to call Things by those Names he thinks best; though in propriety of Speech, Truth, or Falshood, will, I think, scarce agree to them, but as they, some way or other, virtually contain in them some mental Proposition. The *Ideas* that are in a Man's Mind, simply considered, cannot be wrong, unless complex ones, wherein inconsistent parts are jumbled together. All other *Ideas* are in themselves right; and the knowledge about them, right and true Knowledge: but when we come to refer them to any thing, as to their Patterns and Archetypes, then they are capable of being wrong, as far as they disagree with such Archetypes.

§. 27. Having thus given an account of the original, sorts, and extent of our *Ideas*, with several other Considerations, about these (I know not whether I may say) Instruments, or Materials, of our knowledge, the method I at first proposed to my self, would now require, that I should immediately proceed to shew, what use the Understanding makes of them, and what Knowledge we have by them. This was that which in the first general view I had of this Subject, was all that I thought I should have to do: but upon a nearer approach, I find, that there is so close a connexion between *Ideas* and Words; and our abstract *Ideas*, and general Words, have so constant a relation one to another, that it is impossible to speak clearly and distinctly of our Knowledge, which all consists in Propositions, without considering, first, the Nature, Use, and Signification of Language; which therefore must be the business of the next Book.

BOOK III.

CHAP. I.

Of Words or Language in general.

§. 1. **G**OD having designed Man for a sociable Creature, made him not only with an inclination, and under a necessity to have fellowship with those of his own kind; but furnished him also with Language, which was to be the great Instrument, and common Tye of Society. *Man* therefore had by Nature his Organs so fashioned, as to be *fit to frame articulate Sounds*, which we call Words. But this was not enough to produce Language; for Parrots, and several other Birds, will be taught to make articulate Sounds distinct enough, which yet, by no means, are capable of Language.

§. 2. Besides articulate Sounds therefore, it was farther necessary, that he should be *able to use these Sounds, as signs of internal Conceptions*; and to make them stand as marks for the *Ideas* within his own Mind, whereby they might be made known to others, and the Thoughts of Mens Minds be conveyed from one to another.

§. 3. But neither was this sufficient to make Words so useful as they ought to be. It is not enough for the perfection of Language, that Sounds can be made signs of *Ideas*, unless those *signs* can be so made use of, as *to comprehend several particular Things*: For the multiplication of Words would have perplexed their Use, had every particular thing need of a distinct name to be signified by.

§. 4. Words then are made to be signs of our *Ideas*, and are *general or particular, as the Ideas they stand for are general or particular*. But besides these Names which stand for *Ideas*, there be others which Men have found and make use of, not to signify any *Idea*, but the want or absence of some *Ideas*, simple or complex, or all *Ideas* together; such as are the Latin words, *Nihil*, and in English, *Ignorance* and *Barrenness*. All which negative or privative Words, cannot be said properly to belong to, or signify no *Ideas*: for then they would be perfectly insignificant Sounds; but they relate to positive *Ideas*, and signify their absence.

§. 5. It may also lead us a little towards the Original of all our Notions and Knowledge, if we remark, how great a dependence our Words have on common sensible *Ideas*; and how those which are made use of, to stand for Actions and Notions quite removed from sense, have their Original, and are transferred from obvious sensible *Ideas*; v. g. to *Imagine*, *Apprehend*, *Comprehend*, *Adhere*, *Conceive*, *Infill*, *Disgust*, *Disturbance*, *Tranquillity*, &c. are all Words taken from the Operations of sensible Things, and applied to certain Modes of Thinking. *Spirit*, in its primary signification, is Breath; *Angel*, a Messenger: And I doubt not, but if we could trace them to their Originals, we should find, in all Languages, the names, which stand for Things that fall not under our Senses,

to have had their first rise from sensible *Ideas*. By which we may give some kind of guess, what kind of Notions they were, and whence derived, which filled their Minds, who were the first Beginners of Languages; and how Nature, even in the naming of Things, unawares suggested to Men the Originals and Principles of all their Knowledge: whilst, to give Names, that might make known to others any Operations they felt in themselves, or any other *Ideas*, that came not under their Senses, they were fain to borrow Words from ordinary known *Ideas* of Sensation, by that means to make others the more easily to conceive those Operations they experimented in themselves, which made no outward sensible appearances; and then when they had got known and agreed Names, to signify those internal Operations of their own Minds, they were sufficiently furnished to make known by Words, all their other *Ideas*; since they could consist of nothing, but either of outward sensible Perceptions, or of the inward Operations of their Minds about them; we having, as has been proved, no *Ideas* at all, but what originally come either from sensible Objects without, or what we feel within our selves, from the inward Workings of our own Spirits, which we are conscious to our selves of within.

§. 6. But to understand better the use and force of Language, as subservient to Instruction and Knowledge, it will be convenient to consider,

First, To what it is that Names, in the use of Language, are immediately applied.

Secondly, Since all (except proper) Names are general, and so stand not particularly for this or that single Thing; but for sorts and ranks of Things, it will be necessary to consider, in the next place, what the Sorts and Kinds, or, if you rather like the Latin Names, *what the Species and Genera of Things* are, wherein they consist, and how they come to be made. These being (as they ought) well looked into, we shall the better come to find the right use of Words; the natural Advantages and Defects of Language; and the remedies that ought to be used, to avoid the inconveniences of obscurity or uncertainty in the signification of Words: without which, it is impossible to discourse with any clearness, or order, concerning Knowledge: Which being conversant about Propositions, and those most commonly universal ones, has greater connexion with Words, than perhaps is suspected.

These Considerations therefore, shall be the matter of the following Chapters.

CHAP. II.

Of the Signification of Words.

§. 1. **M**AN, though he have great variety of Thoughts, and such, from which others, as well as himself, might receive Profit and Delight; yet they are all within his own Breast, invisible, and hidden from others, nor can of themselves be made appear. The Comfort therefore, and Advantage of Society, not being to be had without Communication of Thoughts, it was necessary, that Man should find out some external sensible Signs, whereby those invisible *Ideas*, which possess his Mind in so great variety, might be made known to others: For which purpose, nothing was so fit, either for Plenty or Quickness, as those articulate Sounds, which with so much Ease and Variety, he found himself able to make. Thus we may conceive how *Words*, which were by Nature so well adapted to that purpose, come to be made use of by Men, as *the Signs of their Ideas*; not by any natural connection, that there is between particular articulate Sounds, and certain *Ideas*, for then there would be but one Language amongst all Men; but by a voluntary Imposition, whereby such a Word is made arbitrarily the Mark of such an *Idea*. The use then of Words, is to be sensible Marks of *Ideas*; and the *Ideas* they stand for, are their proper and immediate Signification.

§. 2. The use Men have of these Marks, being either to record their own *Ideas* for the Assistance of their own Memory; or as it were, to bring them out, and lay them before the view of others. *Words in their primary and immediate Signification, stand for nothing, but the Ideas in the Mind of him that uses them*, how imperfectly soever, or carelessly those *Ideas* are collected from the Things, which they are supposed to represent. When a Man speaks to another, it is, that he may be understood; and the end of the Speech is, that those Sounds, as Marks, may make known his *Ideas* to the Hearer. That then which Words are the Marks of, are the *Ideas* of the Speaker: Nor can any one apply them, as Marks immediately to any thing else, but the *Ideas* that he himself hath: For this would be to make them Signs of his own Conception, and yet apply them to other *Ideas*; which would be to make them Signs, and not Signs of his *Ideas* at the same time; and so in Effect, to have no Signification at all. Words being voluntary Signs, they cannot be voluntary Signs imposed by him on Things he knows not. That would be to make them Signs of nothing, Sounds without Signification. A Man cannot make his Words the Signs either of Qualities in Things, or of Conceptions in the Mind of another, whereof he has none in his own. Till he has some *Ideas* of his own, he cannot suppose them to correspond with the Conceptions of another Man; nor can he use any Signs for them: For it would be the Signs of he knows not what, which is in Truth to be the Sign of nothing. But when he represents to himself other Men's *Ideas*, by some of his own, if he consent to give them the same Names, that other Men do, 'tis still to his own *Ideas*; to *Ideas* that he has, and not to *Ideas* that he has not.

§. 3. This is so necessary in the use of Language, that in this respect, the Knowing, and the Ignorant; the Learned, and Unlearned, use the *Words* they speak (with any meaning) all alike. They, in every Man's

Mouth, stand for the Ideas he has, and which he would express by them. A Child having taken notice of nothing in the Metal he hears called Gold, but the bright shining Yellow-Colour, he applies the Word Gold only to his own *Idea* of that Colour, and nothing else; and therefore calls the same Colour in a Peacock's Tail, Gold. Another that hath better observed, adds to shining Yellow, great Weight: And then the Sound Gold, when he uses it, stands for a complex *Idea* of a shining Yellow, and very weighty Substance. Another adds to those Qualities, Fusibility: And then the Word Gold to him signifies, a Body, bright, yellow, fusible, and very heavy. Another adds Malleability. Each of these uses equally the Word Gold, when they have Occasion to express the *Idea*, they have apply'd it to. But it is evident, that each can apply it only to his own *Idea*; nor can he make it stand, as a Sign of such a complex *Idea*, as he has not.

§. 4. But though Words, as they are used by Men, can properly and immediately signify nothing but the *Ideas*, that are in their Minds; yet they in their Thoughts, give them a secret reference to two other Things.

First, They suppose their Words to be Marks of the Ideas in the Minds also of other Men, with whom they communicate: For else they should talk in vain, and could not be understood, if the Sounds they applied to one *Idea*, were such, as by the Hearer, were apply'd to another, which is to speak two Languages. But in this, Men stand not usually to examine, whether the *Idea* they, and he they discourse with, be the same: But think it enough, that they use the Word, as they imagine, in the common Acceptation of that Language; in which case, they suppose that the *Idea*, they make it a Sign of, is precisely the same, to which the Understanding Men of that Country apply that Name.

§. 5. *Secondly*, Because Men would not be thought to talk barely of their own Imaginations, but of Things as really they are; therefore they often suppose their Words to stand also for the Reality of Things. But this relating more particularly to Substances, and their Names, as, perhaps, the former does to simple *Ideas* and Modes, we shall speak of these two different ways of applying Words more at large, when we come to treat of the Names of mixed Modes, and Substances, in particular: Though give me leave here to say, that it is a perverting the use of Words, and brings unavoidable Obscurity and Confusion into their Signification, whenever we make them stand for any thing, but those *Ideas* we have in our own Minds.

§. 6. Concerning Words also, this is farther to be considered. *First*, That they being immediately the Signs of Men's *Ideas*; and by that means, the Instruments whereby Men communicate their Conceptions, and express to one another those Thoughts and Imaginations, they have within their own Breasts, *there comes by constant use*, to be such a Connexion between certain Sounds, and the Ideas they stand for, that the Names heard, almost as readily excite certain *Ideas*; as if the Objects themselves, which are apt to produce them did actually affect the Senses. Which is manifestly so in all obvious sensible Qualities; and in all Substances, that frequently, and familiarly occur to us.

§. 7. *Secondly*, That though the proper and immediate Signification of Words, are *Ideas* in the Mind of the Speaker; yet because by familiar use from our Cradles, we come to learn certain articulate Sounds very perfectly, and have them readily on our Tongues, and Memories, but yet are not always careful to examine, or settle their Significations perfectly,

perfectly, it *often* happens, that *Men*, even when they would apply themselves to an attentive Consideration, do *set their Thoughts more on Words than Things*. Nay, because Words are many of them learn'd, before the *Ideas* are known for which they stand: Therefore some, not only Children, but Men, speak several Words, no otherwise than Parrots do, only because they have learn'd them, and have been accustomed to those Sounds. But so far as Words are of Use and Signification, so far is there a constant connexion between the Sound and the *Idea*; and a Designation, that the one stand for the other: without which Application of them, they are nothing, but so much insignificant Noise.

§. 8. Words by long and familiar use, as has been said, come to excite in Men certain *Ideas* so constantly and readily, that they are apt to suppose a natural connexion between them. But that they *signifie* only Men's peculiar *Ideas*, and that *by a perfectly arbitrary Imposition*, is evident, in that they often fail to excite in others (even that use the same Language) the same *Ideas* we take them to be the Signs of: And every Man has so inviolable a Liberty, to make Words stand for what *Ideas* he pleases, that no one hath the Power to make others have the same *Ideas* in their Minds, that he has, when they use the same Words, that he does. And therefore the great *Augustus* himself, in the Possession of that Power, which ruled the World, acknowledged he could not make a new Latin Word: which was as much as to say, that he could not arbitrarily appoint, what *Idea* any Sound should be a Sign of, in the Mouths and common Language of his Subjects. 'Tis true, common use, by a tacit Consent; appropriates certain Sounds to certain *Ideas* in all Languages; which so far limits the signification of that Sound, that unless a Man applies it to the same *Idea*, he cannot speak properly. And it is also true, that unless a Man's Words excite the same *Ideas* in the Hearer, which he makes them stand for in speaking, he cannot speak intelligibly. But whatever be the consequences of his use of any Words, different either from the Publick, or that Person to whom he addresses them: This is certain, their signification in his use of them, is limited to his *Ideas*, and they can be Signs of nothing else.

C H A P. III.

Of General Terms.

§. 1. **A**LL Things that exist, being Particulars, it may, perhaps, be thought reasonable, that Words, which ought to be conformed to Things, should be so too, I mean in their Signification: but yet we find the quite contrary. The far *greatest part of Words*, that make all Languages, are *general Terms*: which has not been the Effect of Neglect, or Chance, but of Reason, and Necessity.

§. 2. First, *It is impossible, that every particular Thing should have a distinct peculiar Name*. For the signification and use of Words, depending on that connection, which the Mind makes between its *Ideas*, and the Sounds it uses, as Signs of them, it is necessary in the Application of
Names

Names to Things, that the Mind should have distinct *Ideas* of the Things, and retain also the particular Name that belongs to every one, with its peculiar appropriation to that *Idea*. But it is beyond the Power of humane Capacity to frame and retain distinct *Ideas* of all the particular Things we meet with: every Bird, and Beast, Men saw; every Tree, and Plant that affected the Senses, could not find a Place in the most capacious Understanding. If it be looked on, as an instance of a prodigious Memory, That some Generals have been able to call every Soldier in their Army, by his proper Name: We may easily find a Reason, why Men have never attempted to give Names to each Sheep in their Flock, or Crow that flies over their Heads; much less to call every Leaf of Plants, or Grain of Sand that came in their way, by a peculiar Name.

§. 3. *Secondly*, If it were possible, *it would yet be useless*, because it would not serve to the chief end of Language. Men would in vain heap up Names of particular Things, that would not serve them to communicate their Thoughts. Men learn Names, and use them in Talk with others, only that they may be understood: which is then only done, when by Use or Consent, the Sound I make by the Organs of Speech, excites in another Man's Mind, who hears it, the *Idea* I apply it to in mine, when I speak it. This cannot be done by Names, apply'd to particular Things, whereof I alone having the *Ideas* in my Mind, the Names of them could not be significant, or intelligible to another, who was not acquainted with all those very particular Things, which had fallen under my notice.

§. 4. *Thirdly*, But yet granting this also feasible; (which I think is not,) yet a distinct Name for every particular Thing, would not be of any great use for the improvement of Knowledge: which though founded in particular Things, enlarges it self by general Views; to which, Things reduced into sorts under general Names, are properly subservient. These, with the Names belonging to them, come within some Compass, and do not multiply every Moment, beyond what, either the Mind can contain, or Use requires. And therefore in these, Men have for the most part stopp'd: but yet not so, as to hinder themselves from distinguishing particular Things, by appropriated Names, where Convenience demands it: And therefore in their own Species, which they have most to do with, and wherein they have often occasion to mention particular Persons; there they make use of proper Names, and distinct Individuals have distinct Denominations.

§. 5. Besides Persons, Countries also, Cities, Rivers, Mountains, and other the like Distinctions of Place, have usually found peculiar Names, and that for the same Reason; they being such as Men have often an Occasion to mark particularly, and, as it were, set before others in their Discourses with them. And I doubt not, but if we had Reason to mention particular Horses, as often as we have to mention particular Men, we should have proper Names for the one, as familiar as for the other; and *Bucephalus* would be a Word as much in use, as *Alexander*. And therefore we see that amongst Jockeys, Horses have their proper Names to be known and distinguished by, as commonly as their Servants: Because amongst them, there is often Occasion to mention this or that particular Horse, when he is out of Sight.

§. 6. The next thing to be considered is, *how general Words come to be made*. For since all Things that exist, are only particulars, how come we by general Terms, or where find we those general Natures they are supposed to stand for? Words become general, by being made the signs of general *Ideas*: and *Ideas* become general, by separating from them the circumstances

circumstances of Time, or Place, or any other *Ideas* that may determine them to this or that particular Existence. By this way of abstraction, they are made capable of representing more Individuals than one ; each of which, having in it a conformity to that abstract *Idea*, is (as we call it) of that sort.

§. 7. But to deduce this a little more distinctly, it will not, perhaps, be amiss, to trace our Notions, and Names, from their beginning, and observe by what degrees we proceed, and by what steps we enlarge our *Ideas* from our first infancy. There is nothing more evident, than that the *Ideas* of the Persons Children converse with, (to instance in them alone,) are like the Persons themselves, only particular. The *Ideas* of the Nurse, and the Mother, are well framed in their Minds ; and, like Pictures of them there, represent only those Individuals. The Names they first give to them, are confined to these Individuals ; and the names of Nurse, and Mamma, the Child uses, determine themselves to those Persons. Afterwards, when time and a larger acquaintance, has made them observe, that there are a great many other Things in the World, that in some common agreements of Shape, and several other Qualities, resemble their Father and Mother : and those Persons they have been used to, they frame an *Idea*, which they find those many Particulars do partake in ; and to that they give, with others, the name *Man*, for example. And thus they come to have a general Name, and a general *Idea*. Wherein they make nothing new, but only leave out of the complex *Idea* they had of *Peter* and *James*, *Mary* and *Jane*, that which is peculiar to each, and retain only what is common to them all.

§. 8. By the same way that they come by the general Name and *Idea* of *Man*, they easily advance to more general Names and Notions. For observing, that several Things that differ from their *Idea* of *Man*, and cannot therefore be comprehended under that Name, have yet certain Qualities, wherein they agree with *Man*, by retaining only those Qualities, and uniting them into one *Idea*, they have again another and a more general *Idea* ; to which having given a Name, they make a term of a more comprehensive extension : Which new *Idea*, is made not by any new addition, but only, as before, by leaving out the shape, and some other Properties signified by the name *Man*, and retaining only a Body, with Life, Sense, and spontaneous Motion, comprehended under the name *Animal*.

§. 9. That this is the way whereby Men first formed general *Ideas*, and general Names to them, I think, is so evident, that there needs no other proof of it, but the considering of a Man's self, or others, and the ordinary proceedings of their Minds in Knowledge : And he that thinks general Natures, or Notions, are any thing else but such abstract and partial *Ideas* of more complex ones, taken at first from particular Existences, will, I fear, be at a loss where to find them. For let any one reflect, wherein does his *Idea* of a *Man*, differ from that of *Peter*, and *Paul* ; or his *Idea* of an *Horse*, from that of *Bucephalus*, but in the leaving out something that is peculiar to each Individual ; and retaining so much of those particular complex *Ideas*, of several particular Existences, as they are found to agree in. Of the complex *Ideas*, signified by the names *Man*, and *Horse*, leaving out but those particulars wherein they differ, and retaining only those wherein they agree, and of those, making a new distinct complex *Idea*, and giving the name *Animal* to it, one has a more general term, that comprehends, with *Man*, several other Creatures. Leave out the *Idea* of *Animal*, Sense, and spontaneous Motion, and the remaining complex

plex *Idea*, made up of the remaining simple ones of Body, Life, and Nourishment, becomes a more general one, under the more comprehensive term, *Vivens*. And not to dwell longer upon this particular, so evident in it self, by the same way the Mind proceeds to *Body*, *Substance*, and at last to *Being*, *Thing*, and such universal terms, which stand for any of our *Ideas* whatsoever. To conclude, this whole mystery of *Genera* and *Species*, which make such a noise in the Schools, and are, with Justice, so little regarded out of them, is nothing else but abstract *Ideas*, more or less comprehensive, with Names annexed to them. In all which, this is constant and unvariable, That every more general term, stands for such an *Idea*, as is but a part of any of those contained under it.

§. 10. This may shew us the reason, *why, in the defining of Words*, which is nothing but declaring their signification, *we make use of the Genus*, or next general Word that comprehends it. Which is not out of necessity, but only to save the labour of enumerating the several simple *Ideas*, which the next general Word, or *Genus*, stands for; or, perhaps, sometimes the shame of not being able to do it. But though defining by *Genus* and *Differentia*, (I crave leave to use these terms of Art, though originally Latin, since they most properly suit those Notions they are applied to;) I say, though defining by the *Genus* be the shortest way; yet, I think, it may be doubted, whether it be the best. This I am sure, it is not the only, and so not absolutely necessary. For Definition being nothing but making another understand by Words, what *Idea* the term defined stands for, a definition is best made by enumerating those simple *Ideas* that are combined in the signification of the term Defined: and if instead of such an enumeration, Men have accustomed themselves to use the next general term, it has not been out of necessity, or for greater clearness; but for quickness and dispatch sake. For, I think, that to one who desired to know what *Idea* the word *Man* stood for; if it should be said, that a Man was a solid extended Substance, having Life, Sense, spontaneous Motion, and the Faculty of Reasoning, I doubt not but the meaning of the term *Man*, would be as well understood; and the *Idea* it stands for, be at least as clearly made known, as when it is defined to be a *rational Animal*; which by the several definitions of *Animal*, *Vivens*, and *Corpus*, resolves it self into those enumerated *Ideas*. I have in explaining the term *Man*, followed here the ordinary Definition of the Schools: which though, perhaps, not the most exact, yet serves well enough to my present purpose. And one may in this instance, see what gave occasion to that Rule that a Definition must consist of its *Genus*, and *Differentia*: and it suffices to shew us the little necessity there is of such a Rule, or advantage in the strict observing of it. For Definitions, as has been said, being only the explaining of one Word, by several others so, that the meaning, or *Idea* it stands for, may be certainly known, Languages are not always so made, according to the Rules of Logick, that every term can have its signification, exactly and clearly expressed by two others. Experience sufficiently satisfies us to the contrary; or else those who have made this Rule, have done ill, that they have given us so few Definitions conformable to it. But of Definitions, more in the next Chapter.

§. 11. To return to general Words, it is plain, by what has been said, That *General and Universal*, belong not to the real existence of Things; but are the *Inventions and Creatures of the Understanding*, made by it for its own use, and concern only *Signs*, whether Words, or *Ideas*. Words are general, as has been said, when used, for signs of general *Ideas*; and so are applicable indifferently to many particular Things: And *Ideas* are general, when they are

are set up, as the Representatives of many particular Things: but Universality belongs not to Things themselves, which are all of them particular in their Existence, even those Words, and *Ideas*, which in their signification, are general. When therefore we quit Particulars, the Generals that rest, are only Creatures of our own making, their general Nature being nothing but the capacity they are put into by the Understanding, of signifying or representing many particulars. For the signification they have, is nothing but a relation, that by the Mind of Man is added to them.

§. 12. The next thing therefore to be considered is, *What kind of signification it is, that general Words have.* For as it is evident, that they do not signify barely one particular thing; for then they would not be general Terms, but proper Names: So on the other side, 'tis as evident, they do not signify a plurality; for Man and Men would then signify the same; and the distinction of numbers (as Grammarians call them) would be superfluous and useless. That then which general Words signify, is a sort of Things; and that each of them does, by being a sign of an abstract *Idea* in the Mind, to which *Idea*, as Things existing are found to agree, so they come to be ranked under that name; or, which is all one, be of that sort. Whereby it is evident, that the *Essences* of the sorts, or (if the Latin word pleases better) *Species* of Things, are nothing else but these abstract *Ideas*. For the having the Essence of any Species, being that which makes any Thing to be of that Species, and the conformity to the *Idea*, to which the name is annexed, being that which gives a right to that name, the having the Essence, and the having that Conformity, must needs be the same thing: Since to be of any Species, and to have a right to the name of that Species, is all one. As for example, to be a *Man*, or of the Species *Man*, and to have a right to the name *Man*, is the same thing. Again, to be a *Man*, or of the Species *Man*, and have the Essence of a *Man*, is the same thing. Now since nothing can be a *Man*, or have a right to the name *Man*, but what has a conformity to the abstract *Idea* the name *Man* stands for; nor any thing be a *Man*, or have a right to be of the Species *Man*, but what has the Essence of that Species, it follows, that the Abstract *Idea*, for which the name stands, and the Essence of the Species, is one and the same. From whence it is easie to observe, that the essences of the sorts of things, and consequently the sorting of Things, is the Workmanship of the Understanding, since it is the Understanding that abstracts and makes those general *Ideas*.

§. 13. I would not here be thought to forget, much less to deny, that Nature, in the production of Things, makes several of them alike: there is nothing more obvious, especially in the Races of Animals, and all Things propagated by Seed. But yet, I think, we may say, the sorting of them under Names, is the *Workmanship of the Understanding*, taking occasion from the similitude it observes amongst them, to make abstract general *Ideas*, and set them up in the Mind, with Names annexed to them, as Patterns, or Forms, (for in that sense the word Form has a very proper signification,) to which, as particular Things existing, are found to agree: so they come to be of that Species, have that Denomination, or are put into that *Classis*. For when we say, this is a *Man*, that a *Horse*; this *Justice*, that *Cruelty*; this a *Watch*, that a *Jack*; what do we else but rank Things under different specifick Names, as agreeing to those abstract *Ideas*, of which we have made those Names the signs? And what are the Essences of those Species, set out and marked by Names, but these abstract *Ideas* in the Mind; which are, as it were, the bonds between particular Things that exist, and the Names they are to be ranked under?

And when general Names have any connexion with particular Beings, these abstract *Ideas* are the *Medium* that unites them: so that the *Essences* of Species, as distinguished and denominated by us, neither are, nor can be any thing but those precise abstract *Ideas* we have in our Minds. And therefore the supposed real *Essences* of Substances, if different from our abstract *Ideas*, cannot be the *Essences* of the Species we rank Things into. For two Species may be one, as rationally, as two different *Essences*, be the *Essence* of one Species: And I demand, what are the alterations may, or may not be made in a Horse, or Lead, without making either of them to be of another Species? By determining the Species of Things, by our abstract *Ideas*, this is easie to resolve: but if any one will regulate himself herein, by supposed real *Essences*, he will, I suppose, be at a loss: and he will never be able to know when any thing precisely ceases to be of the Species of an Horse, or Lead.

§. 14. Nor will any one wonder, that I say these *Essences*, or abstract *Ideas*, (which are the measures of Names, and the boundaries of Species,) are the *Workmanship* of the *Understanding*, who considers, that at least the complex ones are often, in several Men, different Collections of simple *Ideas*: and therefore that is *Covetousness* to one Man, which is not so to another. Nay, even in Substances, where their abstract *Ideas* seem to be taken from the Things themselves, they are not constantly the same; no not in that Species, which is most familiar to us, and with which we have the most intimate acquaintance: It having been more than once doubted, whether the *Fœtus* born of a Woman, were a Man, even so far, as that it hath been debated, whether it were, or were not to be nourished and baptized: which could not be, if the abstract *Idea*, or *Essence*, to which the name *Man* belonged, were of Nature's making, and were not the uncertain and various Collection of simple *Ideas*, which the *Understanding* puts together, and then abstracting it, affixed a name to it. So that in truth, every distinct abstract *Idea*, is a distinct *Essence*: and the names that stand for such distinct *Ideas*, are the names of Things essentially different. Thus a Circle is as essentially different from an Oval, as a Sheep from a Goat: and Rain is as essentially different from Snow, as Water from Earth; that abstract *Idea* which is the *Essence* of one, being impossible to be communicated to the other. And thus any two abstract *Ideas*, that in any part vary one from another, with two distinct names annexed to them, constitute two distinct sorts, or, if you please, Species, as essentially different, as any two the most remote, or opposite in the World.

§. 15. But since the *Essences* of Things are thought, by some, (and not without reason,) to be wholly unknown; it may not be amiss to consider the several significations of the word *Essence*.

First, *Essence* may be taken for the very being of any thing, whereby it is, what it is. And thus the real internal, but generally in Substances, unknown Constitution of Things, whereon their discoverable Qualities depend, may be called their *Essence*. This is the proper original signification of the Word, as is evident from the formation of it; *Essentia*, in its primary notation signifying properly *Being*. And in this sense it is still used, when we speak of the *Essence* of particular things, without giving them any Name.

Secondly, The Learning and Disputes of the Schools, having been much busied about *Genus* and *Species*, the Word *Essence* has almost lost its primary Signification; and instead of the real Constitution of things, has been almost wholly applied to the artificial Constitution of *Genus* and *Species*,

Species. 'Tis true, there is ordinarily supposed a real Constitution of the sorts of Things; and 'tis past doubt, there must be some real Constitution, on which any Collection of simple *Ideas* co-existing, must depend. But it being evident, that Things are ranked under Names into sorts or Species, only as they agree to certain abstract *Ideas*, to which we have annexed those Names, the Essence of each *Genus*, or Sort, comes to be nothing but that abstract *Idea*, which the General, or *Sortal* (if I may have leave so to call it from *Sort*, as I do *General* from *Genus*,) Name stands for. And this we shall find to be that, which the Word Essence imports, in its most familiar use. These two sorts of Essence, I suppose, may not unfitly be termed, the one the *Real*, the other the *Nominal Essence*.

§. 16. *Between the Nominal Essence, and the Name*, there is so near a *Connexion*, that the Name of any sort of Things cannot be attributed to any particular Being, but what has this Essence, whereby it answers that abstract *Idea*, whereof that Name is the Sign.

§. 17. Concerning the real Essences of corporeal Substances, (to mention those only,) there are, if I mistake not, two Opinions. The one is of those, who using the Word Essence, for they know not what, suppose a certain number of those Essences, according to which, all natural things are made, and wherein they do exactly every one of them partake, and so become of this or that Species. The other, and more rational Opinion, is of those, who look on all natural Things to have a real, but unknown Constitution of their insensible Parts, from which flow those sensible Qualities, which serve us to distinguish them one from another, according as we have Occasion to rank them into sorts, under common Denominations. The former of these Opinions, which supposes these Essences, as a certain number of Forms or Molds, wherein all natural Things, that exist, are cast, and do equally partake, has, I imagine, very much perplexed the Knowledge of natural Things. The frequent Productions of Monsters, in all the Species of Animals, and of Changelings, and other strange Issues of humane Birth, carry with them Difficulties, not possible to consist with this *Hypothesis*: Since it is impossible, that two Things, partaking exactly of the same real Essence, should have different Properties, as that two Figures partaking in the same real Essence of a Circle, should have different Properties. But were there no other Reason against it, yet the *supposition of Essences, that cannot be known*; and yet the making them to be that, which distinguishes the Species of Things, is so wholly *useless*, and unserviceable to any part of our Knowledge, that that alone were sufficient, to make us lay it by; and content our selves with such Essences of the Sorts or Species of Things, as come within the reach of our Knowledge: which, when seriously considered, will be found, as I have said, to be nothing else, but those abstract complex *Ideas*, to which we have annexed distinct general Names.

§. 18. *Essences* thus distinguished into *Nominal* and *Real*, we may observe, that in the Species of simple *Ideas* and *Modes*, they are always the same: But in *Substances*, always quite different. Thus a Figure including a Space between three Lines, is the real, as well as nominal Essence of a Triangle; it being not only the abstract *Idea* to which the general Name is annexed, but the very *Essentia*, or Being, of the thing it self, that Foundation from which all its Properties flow, and to which they are all inseparably annexed. But it is far otherwise concerning that parcel of Matter, which makes the Ring on my Finger, wherein these two Essences are apparently different. For it is the real Constitution of its insensible Parts, on which depend all those Properties of Colour, Weight, Fusibility, Fixedness, &c.

which are to be found in it. Which Constitution we know not; and so having no particular *Idea* of, have no Name that is the Sign of it. But yet it is its Colour, Weight, Fusibility, and Fixedness, &c. which makes it to be Gold, or gives it a right to that Name, which is therefore its nominal Essence. Since nothing can be call'd Gold, but what has a Conformity of Qualities to that abstract complex *Idea*, to which that Name is annexed. But this Distinction of Essences, belonging particularly to Substances, we shall, when we come to consider their Names, have an occasion to treat of more fully.

§. 19. That such *abstract Ideas*, with Names to them, as we have been speaking of, are *Essences*, may farther appear by what we are told concerning Essences, *viz.* that they are all ingenerable, and incorruptible. Which cannot be true of the real Constitution of Things, which begin and perish with them. All Things, that exist in Nature, besides their Author, are all liable to Change; especially those Things we are acquainted with, and have ranked into Bands, under distinct Names or Ensigns. Thus that, which was Grass to Day, is to Morrow the Flesh of a Sheep; and within few Days after, becomes part of a Man: In all which, and the like Changes, 'tis evident, their real Essence, that Constitution whereon the Properties of these several things depended, is destroy'd, and perishes with them. But Essences being taken for *Ideas*, established in the Mind, with Names annexed to them, they are supposed to remain steadily the same, whatever mutations the particular Substances are liable to. For whatever becomes of *Alexander* and *Bucephalus*, the *Ideas* to which Man and Horse are annexed, are supposed nevertheless to remain the same; and so the Essences of those Species are preserved undestroy'd, whatever Changes happen to any, or all of the Individuals of those Species. By this means the Essence of a Species rests safe and entire, without the existence of so much as one Individual of that kind. For were there now no Circle existing any where in the World, (as, perhaps, that Figure exists not any where exactly marked out,) yet the *Idea* annexed to that Name would not cease to be what it is; and to be as a pattern, to determine which of the particular Figures we meet with, have, or have not a Right to the Name Circle, and so by having that Essence, were of that Species. And though there neither were, nor had been in Nature such a Beast as an Unicorn, nor such a Fish as a Mermaid; yet supposing those Names to stand for complex abstract *Ideas*, that contained no inconsistency in them; the Essence of a Mermaid is as intelligible, as that of a Man; and the *Idea* of an Unicorn, as certain, steady, and permanent, as that of an Horse. From what has been said, it is evident, that the Doctrine of the Immutability of Essences, proves them to be only abstract *Ideas*; and is founded on the Relation, established between them, and certain Sounds as Signs of them; and will always be true, as long as the same Name can have the same signification.

§. 20. To conclude, this is that, which in short I would say, (*viz.*) that all the great Business of *Genera* and *Species*, and their Essences, amounts to no more but this, That Men making abstract *Ideas*, and settling them in their Minds, with Names annexed to them, do thereby enable themselves to consider Things, and discourse of them, as it were in bundles, for the easier and readier improvement, and communication of their Knowledge, which would advance but slowly, were their Words and Thoughts confined only to Particulars.

C H A P. IV.

Of the Names of Simple Ideas.

§. 1. **T**Hough all Words, as I have shewed, signifie nothing immediately, but the *Ideas* in the Mind of the Speaker; yet upon a nearer survey, we shall find that the *Names of simple Ideas, mixed Modes,* (under which I comprise Relations too,) *and natural Substances, have each of them something peculiar,* and different from the others. For Example:

§. 2. *First, The Names of simple Ideas and Substances, with the abstract Ideas* in the Mind, which they immediately signifie, *intimate also some real Existence,* from which was derived their original pattern. But the *Names of mixed Modes, terminate in the Idea* that is in the Mind, and lead not the Thoughts any farther, as we shall see more at large in the following Chapter.

§. 3. *Secondly, The Names of simple Ideas and Modes, signifie always the real, as well as nominal Essence of their Species.* But the *Names of natural Substances, signifie rarely, if ever, any thing but barely the nominal Essences of those Species,* as we shall shew in the Chapter, that treats of the Names of Substances in particular.

§. 4. *Thirdly, The Names of simple Ideas are not capable of any definition;* the Names of all complex *Ideas* are. It has not, that I know, hitherto been taken notice of by any Body, what Words are, and what are not capable of being defined: the want whereof is (as I am apt to think) not seldom the occasion of great wrangling, and obscurity in Men's Discourses, whilst some demand definitions of Terms, that cannot be defined; and others think, they ought to rest satisfied, in an Explication made by a more general Word, and its Restriction, (or to speak in Terms of Art by a Genus and Difference,) when even after that regular Definition, those who hear it, have often no more a clear Conception of the meaning of the Word, than they had before. This at least, I think, that the shewing what Words are, and what are not capable of Definitions, and wherein consists a good Definition, is not wholly besides our present purpose; and perhaps, will afford so much Light to the Nature of these Signs, and our *Ideas,* as to deserve a more particular Consideration.

§. 5. I will not here trouble my self, to prove that all Terms are not definable from that Progress, *in infinitum,* which it will visibly lead us into, if we should allow, that all Names could be defined. For if the Terms of one Definition, were still to be defined by another, Where at last should we stop? But I shall from the Nature of our *Ideas,* and the Signification of our Words shew, *why some Names can, and others cannot be defined,* and which they are.

§. 6. I think, it is agreed, that a *Definition is nothing else, but the shewing the meaning of one Word by several other not synonymous Terms.* The meaning of Words, being only the *Idea* they are made to stand for by him that uses them; the meaning of any Term is then shewed, or the Word is defined, when by other Words, the *Idea* it is annexed to, and made the Sign of, in the Mind of the Speaker, is as it were represented, or set before the view of another; and thus its Signification ascertained: This is the only use and end of Definitions; and therefore the only measure of what is, or is not a good Definition.

§. 7. This being premised, I say, that *the Names of simple Ideas, and those only, are incapable of being defined.* The Reason whereof is this, That the several Terms of a Definition, signifying several *Ideas,* they can altogether by no means represent an *Idea,* which hath no Composition at
all.

all: And therefore a Definition, which is properly nothing but the shewing the meaning of one Word by several others, not signifying each the same thing, can in the Names of simple *Ideas* have no Place.

§. 8. The not observing this difference in our *Ideas*, and their Names, has produced that eminent trifling in the Schools, which is so easie to be observed, in the definitions they give us of some few of these simple *Ideas*. For as to the greatest part of them, even those Masters of Definitions, were fain to leave them untouch'd, meerly by the impossibility they found in it. What more exquisite *Jargon* could the Wit of Man invent, than this Definition, *The Act of a being in Power, as far forth as in Power*, which would puzzle any rational Man, to whom it was not already known by its famous absurdity, to guess what Word it could ever be supposed to be the Explication of. If *Tully* asking a *Dutchman* what *Beweeginge* was, should have received this Explication in his own Language, that it was *Actus entis in potentia quatenus in potentia*; I ask whether any one can imagine he could thereby have understood what the Word *Beweeginge* signified, or have guessed what *Idea* a *Dutchman* ordinarily had in his Mind, and would signifie to another, when he used that sound.

§. 9. Nor have the modern Philosophers, who have endeavoured to throw off the *Jargon* of the Schools, and speak intelligibly, much better succeeded in defining simple *Ideas*, whether by explaining their Causes, or any otherwise. The *Atomists*, who define Motion to be a *passage from one place to another*, What do they more than put one synonymous Word for another? For what is *Passage* other than *Motion*? And if they were asked what *Passage* was, How would they better define it than by *Motion*? For is it not at least as proper and significant, to say, *Passage is a Motion from one place to another*, as to say, *Motion is a Passage*, &c. This is to translate, and not to define, when we change two Words of the same Signification one for another; which when one is better understood than the other, may serve to discover what *Idea* the unknown stands for; but is very far from a Definition, unless we will say, every English Word in the Dictionary, is the definition of the Latin Word it answers, and that Motion is a definition of *Motus*. Nor will the successive Application of the parts of the Superficies of one Body, to those of another, which the *Cartesians* give us, prove a much better definition of Motion, when well examined.

§. 10. *The Act of Perspicuous, as far forth as perspicuous*, is another Peripatetick definition of a simple *Idea*; which though not more absurd than the former of *Motion*, yet betrays its Uselessness and Insignificancy more plainly, because Experience will easily convince any one, that it cannot make the meaning of the Word *Light* (which it pretends to define) at all understood by a blind Man: but the definition of Motion appears not at first sight so useless, because it escapes this way of Trial. For this simple *Idea*, entering by the Touch as well as Sight; 'tis impossible to shew an Example of any one, who has no other way to get the *Idea* of Motion, but barely by the definition of that Name. When the *Cartesians* tell us, that *Light* is a great number of little Globules, striking briskly on the bottom of the Eye, they speak a little more intelligibly than the Schools: but yet these Words never so well understood, would make the *Idea*, the Word *Light* stands for, no more known to a Man that understands it not before, than if one should tell him, that *Light* was nothing but a Company of little Tennis-balls, which Fairies all Day long strook with Rackets against some Men's Fore-heads, whilst they passed by others. For granting his Explication of the thing to be true; yet the

Idea

Idea of the cause of Light, if we had it never so exact, would no more give us the *Idea* of Light it self, as it is such a particular perception in us, than the *Idea* of the Figure and Motion of a sharp piece of Steel, would give us the *Idea* of that Pain, which it is able to cause in us. For the cause of any Sensation, and the Sensation it self, in all the simple *Ideas* of one Sense, are two *Ideas*; and two *Ideas* so different, and distant one from another, that no two can be more so. And therefore should *Des Cartes's* Globules strike never so long on the *retina* of a Man, who was blind by a *Gutta Serena*, he would thereby never have any *Idea* of Light, or any thing approaching to it; though he understood what little Globules were, and what striking on another Body was, never so well.

§. 11. *Simple Ideas*, as has been shewed, are only to be got by those *impressions* Objects themselves make on our Minds, by the proper Inlets appointed to each sort. If they are not received this way, all the Words in the World, made use of to explain, or define any of their Names, will never be able to produce in us the *Idea* it stands for. For Words being Sounds, can produce in us no other simple *Ideas*, than of those very Sounds; nor excite any in us, but by that voluntary connexion, which is known to be between them, and those simple *Ideas*, which common Use has made them Signs of. He that thinks otherwise, let him try if any Words can give him the taste of a Pine-Apple, and make him have the true *Idea* of the Relish of that celebrated delicious Fruit. So far as he is told it has a resemblance with any Tastes, whereof he has the *Ideas* already in his Memory, imprinted there by sensible Objects not Strangers to his Palate; so far may he approach that resemblance in his Mind. But this is not giving us that *Idea* by a Definition, but exciting in us other simple *Ideas*, by their known Names; which will be still very different from the true Tastes of that Fruit it self. In Light and Colours, and all other simple *Ideas*, it is the same thing: for the signification of Sounds, is not natural, but only imposed and arbitrary. And no definition of *Light*, or *Redness*, is more fitted, or able to produce either of those *Ideas* in us, than the sound *Light*, or *Red*, by it self. For to hope to produce an *Idea* of Light, or Colour, by a Sound, however formed, is to expect that Sounds should be visible, or Colours audible; and to make the Ears do the office of all other Senses. Which is all one as to say, that we might Taste, Smell, and See, by the Ears: a sort of Philosophy worthy only of *Sanco Panca*, who had the Faculty to see *Dulcinea* by Hearsay. And therefore he that has not before received into his Mind, by the proper Inlet, the simple *Idea* which any Word stands for, can never come to know the signification of that Word, by any other Words, or Sounds, whatsoever put together, according to any Rules of Definition. The only way is, by applying to his Senses the proper Object; and so producing that *Idea* in him, for which he has learn'd the name already. A studious blind Man, who had mightily beat his Head about visible Objects, and made use of the explication of his Books and Friends, to understand those names of Light, and Colours, which often came in his way; bragg'd one day, That he now understood what Scarlet signified. Upon which his Friend demanding, what Scarlet was? the blind Man answered, It was like the Sound of a Trumpet. Just such an Understanding of the name of any other simple *Idea* will he have, who hopes to get it only from a Definition, or other Words made use of to explain it.

§. 12. The case is quite otherwise in *complex Ideas*; which consisting of several simple ones, it is in the power of words, standing for the several *Ideas*, that make that Composition, to imprint complex *Ideas* in the Mind,

Mind, which were never there before ; and so make their Names be understood. In such Collections of *Ideas*, passing under one name, *Definitions*, or the teaching the signification of one word, by several others, has place, and may make us understand the Names of Things, which never came within the reach of our Senses ; and frame *Ideas* suitable to those in other Mens Minds, when they use those Names : provided that none of the terms of the Definition stand for any such simple *Ideas*, which he to whom the Explication is made, has never yet had in his Thoughts. Thus the word *Statue* may be explained to a blind Man by other words, when *Picture* cannot, his Senses having given him the *Idea* of Figure, but not of Colours, which therefore Words cannot excite in him. This gain'd the Prize to the Painter, against the Statuary ; each of which contending for the excellency of his Art, and the Statuary bragging, that his was to be preferred, because it reached farther, and even those who had lost their Eyes, could yet perceive the excellency of it. The Painter agreed to refer himself to the Judgment of a blind Man ; who being brought where there was a Statue made by the one, and a Picture drawn by the other ; he was first led to the Statue, in which he traced, with his Hands, all the Lineaments of the Face and Body ; and with great admiration, applauded the Skill of the Workman : But being led to the Picture, and having his Hands laid upon it, was told, That now he touched the Head, and then the Forehead, Eyes, Nose, &c. as his Hand moved over the Parts of the Picture on the Cloth, without finding any the least distinction : Whereupon he cried out, that certainly that must needs be a very admirable and divine piece of Workmanship, which could represent to them all those Parts, where he could neither feel nor perceive any thing.

§. 13. He that should use the word *Rainbow*, to one who knew all those Colours, but yet had never seen that *Phænomenon*, would, by enumerating the Figure, Largeness, Position, and Order of the Colours, so well define that word, that it might be perfectly understood. But yet that Definition, how exact and perfect soever, would never make a blind Man understand it ; because several of the simple *Ideas* that make that complex one, being such as he never received by Sensation and Experience, no Words are able to excite them in his Mind.

§. 14. Simple *Ideas*, as has been shewed, can only be got by Experience, from those Objects which are proper to produce in us those Perceptions. When by this means we have our Minds stored with them, and know the Names for them, then we are in a condition to define, and by Definition to understand the Names of complex *Ideas* that are made up of them. But when any term stands for a simple *Idea*, that a Man has never yet had in his Mind, it is impossible, by any Words, to make known its meaning to him : When any term stands for an *Idea* a Man is acquainted with, but is ignorant, that that term is the sign of it, there another name, of the the same *Idea* which he has been accustomed to, may make him understand its meaning. But in no case whatsoever, is any name, of any simple *Idea*, capable of a Definition.

Fourthly, But though the Names of simple *Ideas*, have not the help of Definition to determine their signification ; yet that hinders not but that they are generally less doubtful and uncertain, than those of mixed Modes and Substances. Because they standing only for one simple Perception, Men, for the most part, easily and perfectly agree in their signification, And there is little room for mistake and wrangling about their meaning. He that knows once, that Whiteness is the name of that Colour he has observed

served in Snow, or Milk, will not be apt to misapply that Word, as long as he retains that *Idea*; which when he has quite lost, he is not apt to mistake the meaning of it, but perceives he understands it not. There is neither a multiplicity of simple *Ideas* to be put together, which makes the doubtfulness in the Names of mixed Modes; nor a supposed, but an unknown real Essence, with Properties depending thereon, the precise number whereof, are also unknown, which makes the difficulty in the Names of Substances. But on the contrary, in simple *Ideas* the whole signification of the Name is known at once, and consists not of parts, whereof more or less being put in, the *Idea* may be varied, and so the signification of its Name, be obscure, or uncertain.

§. 16. *Fifthly*, This farther may be observed, concerning simple *Ideas*, and their Names, that they have but few *Ascents in linea prædicamentali*, (as they call it,) from the lowest Species, to the summum Genus. The reason whereof is, that the lowest Species being but one simple *Idea*, nothing can be left out of it, that so the difference being taken away, it may agree with some other thing in one common to them both; which having one Name, is the Genus of the other two: v. g. There is nothing can be left out of the *Idea* of White and Red, to make them agree in one common appearance, and so have one general name; as *Rationality* being left out of the complex *Idea* of *Man*, makes it agree with Brute, in the more general *Idea* and name of *Animal*. And therefore when to avoid unpleasant enumerations, Men would comprehend both *White* and *Red*, and several other such simple *Ideas*, under one general name, they have been fain to do it by a Word, which denotes only the way they get into the Mind. For when *White*, *Red*, and *Yellow*, are all comprehended under the Genus or name *Colour*, it signifies no more, but such *Ideas*, as are produced in the Mind only by the Sight, and have entrance only through the Eyes. And when they would frame yet a more general term, to comprehend both *Colours* and *Sounds*, and the like simple *Ideas*, they do it by a Word, that signifies all such as come into the Mind only by one Sense: And so the general term *Quality*, in its ordinary acception, comprehends *Colours*, *Sounds*, *Tastes*, *Smells*, and tangible *Qualities*, with distinction from *Extension*, *Number*, *Motion*, *Pleasure*, and *Pain*, which make impressions on the Mind, and introduce their *Ideas* by more Senses than one.

§. 17. *Sixthly*, The Names of simple *Ideas*, Substances, and mixed Modes, have also this difference; That those of mixed Modes stand for *Ideas* perfectly arbitrary: Those of Substances, are not perfectly so; but refer to a pattern, though with some latitude: and those of simple *Ideas* are perfectly taken from the existence of Things, and are not arbitrary at all. Which what difference it makes in the significations of their Names, we shall see in the following Chapters.

The Names of simple Modes, differ little from those of simple *Ideas*.

CHAP. V.

Of the Names of mixed Modes and Relations.

§. 1. **T**HE Names of mixed Modes being general, they stand, as has been shewn, for Sorts or Species of Things, each of which has its peculiar Essence. The Essences of these Species also, as has been shewed, are nothing but the abstract *Ideas* in the Mind, to which the Name is annexed. Thus far the Names and Essences of mixed Modes, have nothing but what is common to them, with other *Ideas*: But if we take a little nearer survey of them, we shall find, that they have something peculiar, which, perhaps, may deserve our attention.

§. 2. The first Particularity I shall observe in them is, that the abstract *Ideas*, or, if you please, the Essences of the several Species of mixed Modes are made by the Understanding, wherein they differ from those of simple *Ideas*: in which sort, the Mind has no power to make any one, but only receives such as are presented to it, by the real Existence of Things operating upon it.

§. 3. In the next place, these *Essences of the Species of mixed Modes*, are not only made by the Mind, but made very arbitrarily, made without Patterns, or reference to any real Existence. Wherein they differ from those of Substances, which carry with them the supposition of some real Being, from which they are taken, and to which they are conformable. But in its complex *Ideas* of mixed Modes, the Mind takes a liberty not to follow the Existence of Things exactly. It unites and retains certain Collections, as so many distinct specifick *Ideas*, whilst others, that as often occur in Nature, and are as plainly suggested by outward Things, pass neglected without particular Names or Specifications. Nor does the Mind, in these of mixed Modes, as in the complex *Ideas* of Substances, examine them by the real Existence of Things; or verifie them by Patterns, containing such peculiar Compositions in Nature. To know whether his *Idea* of Adultery, or Incest, be right, will a Man seek it any where amongst Things existing? Or is it true, because any one has been Witness to such an Action? No: but it suffices here, that Men have put together such a Collection into one complex *Idea*, that makes the Archetype, and specifick *Idea*, whether ever any such Action were committed in *rerum natura*, or no.

§. 4. To understand this aright, we must consider wherein this making of these complex *Ideas* consists; and that it is not in the making any new *Idea*, but putting together those which the Mind had before. Wherein the Mind does these three things: First, It chuses a certain number. Secondly, It gives them connexion, and makes them into one *Idea*. Thirdly, It ties them together by a Name. If we examine how the Mind proceeds in these, and what liberty it takes in them, we shall easily observe, how these Essences of the Species of mixed Modes, are the Workmanship of the Mind; and consequently, that the Species themselves are of Men's making.

§. 5. No body can doubt, but that these *Ideas* of mixed Modes, are made by a voluntary Collection of *Ideas* put together in the Mind, independent from any original Patterns in Nature, who will but reflect, that this sort of complex *Ideas* may be made, abstracted, and have names given them, and so a Species be constituted, before any one individual of that Species

Species ever existed. Who can doubt, but the *Ideas* of Sacrilege, or Adultery, might be framed in the Mind of Men, and have names given them; and so these Species of mixed Modes be constituted, before either of them was ever committed; and might be as well discoursed of, and reasoned about, and as certain Truths discovered of them, whilst yet they had no being but in the Understanding, as well as now that they have but too frequently a real Existence? Whereby it is plain, how much *the sorts of mixed Modes are the Creatures of the Understanding*, where they have a Being as subservient to all the ends of real Truths and Knowledge, as when they really exist: And we cannot doubt, but Law-makers have often made Laws about Species of Actions, which were only the Creatures of their own Understanding; Beings that had no other existence, but in their own Minds. And, I think, no body can deny, but that the Resurrection was a Species of mixed Modes in the Mind, before it really existed.

§. 6. To see *how arbitrarily these Essences of mixed Modes are made by the Mind*, we need but take a view of almost any of them. A little looking into them, will satisfy us, that 'tis the Mind, that combines several scattered independent *Ideas*, into one complex one; and by the common name it gives them, makes them the Essence of a certain Species, without regulating it self by any connexion they have in Nature. For what greater connexion in Nature, has the *Idea* of a Man, than the *Idea* of a Sheep with Killing, that this is made a particular Species of Action, signified by the word *Murder*, and the other not? Or what Union is there in Nature, between the *Idea* of the Relation of a Father, with Killing, than that of a Son, or Neighbour; that these are combined into one complex *Idea*, and thereby made the Essence of the distinct Species *Parricide*, whilst the others make no distinct Species at all? But though they have made killing a Man's Father, or Mother, a distinct Species from killing his Son, or Daughter; yet in some other cases, Son and Daughter are taken in too, as well as Father and Mother; and they are all equally comprehended in the same Species, as in that of Incest. Thus the Mind in mixed Modes arbitrarily unites into complex *Ideas*, such as it finds convenient; whilst others that have altogether as much union in Nature, are left loose, and never combined into one *Idea*, because they have no need of one name. 'Tis evident then, that the Mind, by its free choice, gives a connexion to a certain number of *Ideas*; which in Nature have no more union with one another, than others that it leaves out: Why else is the part of the Weapon, the beginning of the Wound is made with, taken notice of, to make the distinct Species call'd *Stabbing*, and the Figure and Matter of the Weapon left out? I do not say, this is done without reason, as we shall see more by and by: but this I say, that it is done by the free choice of the Mind, pursuing its own ends; and that therefore these Species of mixed Modes, are the Workmanship of the Understanding: And there is nothing more evident, than that for the most part, in the framing these *Ideas*, the Mind searches not its Patterns in Nature, nor refers the *Ideas* it makes to the real existence of Things; but puts such together, as may best serve its own purposes, without tying it self to a precise intimation of any thing that really exists.

§. 7. But though these complex *Ideas*, or *Essences of mixed Modes*, depend on the Mind, and are made by it with great liberty; yet they are *not made at random*, and jumbled together without any reason at all. Though these complex *Ideas* be not always copied from Nature, yet they are always suited to the end for which abstract *Ideas* are made: And though they be Combinations made of *Ideas*, that are loose enough, and

have as little union in themselves, as several other, to which the Mind gives a connexion that combines them into one *Idea*; yet they are always made for the convenience of Communication, which is the chief end of Language. The Use of Language is, by short Sounds to signify with ease and dispatch general Conceptions; wherein not only abundance of particulars may be contained, but also a great variety of independent *Ideas*, collected into one complex one. In the making therefore of the Species of mixed Modes, Men have had regard only to such Combinations, as they had occasion to mention one to another. Those they have combined into distinct complex *Ideas*, and given names to; whilst others, that in Nature have as near an union, are left loose and unregarded. For to go no farther than humane Actions themselves, if they would make distinct abstract *Ideas*, of all the Varieties might be observed in them, the Number must be infinite, and the Memory confounded with the Plenty, as well as overcharged to little purpose. It suffices, that Men make and name so many complex *Ideas* of these mixed Modes, as they find they have occasion to have names for, in the ordinary occurrence of their Affairs. If they join to the *Idea* of Killing, the *Idea* of Father, or Mother, and so make a distinct Species from killing a Man's Son, or Neighbour, it is because of the distinct punishment, the one deserves different from the other, Murther; and therefore they find it necessary to mention it by a distinct name, which is the end of making that distinct Combination. But though the *Ideas* of Mother and Daughter, are so differently treated, in reference to the *Idea* of Killing, that the one is joined with it, to make a distinct abstract *Idea* with a name, and so a distinct Species, and the other not; yet in respect of carnal Knowledge, they are both taken in under *Incest*; and that still for the same convenience of expressing under one name, and reckoning of one Species, such unclean mixtures, as have a peculiar turpitude beyond others; and this to avoid Circumlocutions, and tedious Descriptions.

§. 8. A moderate skill in different Languages, will easily satisfy one of the truth of this, it being so obvious to observe great store of Words in one Language, which have not any that answer them in another. Which plainly shews, that those of one Country, by their Customs and manner of Life, have found occasion to make several complex *Ideas*, and give names to them, which others never collected into specifick *Ideas*. This could not have happened, if these Species were the steady Workmanship of Nature; and not Collections made and abstracted by the Mind, in order to naming, and for the convenience of Communication. The terms of our Law, which are not empty Sounds, will hardly find Words that answer them in the Spanish, or Italian, no scanty Languages; much less, I think, could any one translate them into the *Caribee*, or *Westoe* Tongues: And the *Verfura* of the Romans, or *Corban* of the Jews, have no Words in other Languages to answer them: The reason whereof is plain, from what has been said. Nay, if we will look a little more nearly into this matter, and exactly compare different Languages, we shall find, that though they have Words, which in Translations and Dictionaries, are supposed to answer one another; yet there is scarce one of ten, amongst the names of complex *Ideas*, especially of mixed Modes, that stands for the same precise *Idea*, which the Word does that in Dictionaries it is rendered by. There are no *Ideas* more common, and less compounded, than the Measures of Time, Extension, and Weight, and the Latin names *Hora*, *Pes*, *Libra*, are, without difficulty, rendered by the English names, *Hour*, *Foot*, and *Pound*: But yet there is nothing more evident, than that the

the *Ideas* a *Roman* annexed to these Latin Names, were very far different from those which an *English*-man expresses by those English ones. And if either of these should make use of the measures, that those of the other Language design'd by their names, he would be quite out in his account. These are too sensible proofs to be doubted; and we shall find this much more so, in the names of more abstract and compounded *Ideas*; such as are the greatest part of those which make up Moral Discourses: whose Names, when Men come curiously to compare, with those they are translated into, in other Languages, they will find very few of them exactly to correspond in the whole extent of their Significations.

§. 9. The reason why I take so particular notice of this, is, that we may not be mistaken about *Genera*, and *Species*, and *Essences*, as if they were Things regularly and constantly made by Nature, and had a real Existence in Things; when they appear, upon a more wary survey, to be nothing else but an Artifice of the Understanding, for the easier signifying such Collections of *Ideas*, as it should often have occasion to communicate by one general term; under which, divers particulars, as far forth as they agreed to that abstract *Idea*, might be comprehended. And if the doubtful signification of the word *Species*, may make it sound harsh to some, that I say, that the Species of mixed Modes are made by the Understanding; yet, I think, it can by no body be denied, that 'tis the Mind makes those abstract complex *Ideas*, to which specifick names are given. And if it be true, as it is, that the Mind makes these Patterns, for sorting and naming of Things, I leave it to be considered, who makes the Boundaries of the Sort, or *Species*; since with me, *Species* and *Sort* have no other difference, than that of a Latin and English *Idiom*.

§. 10. The near relation that there is between *Species*, *Essences*, and their general Names, at least in mixed Modes, will farther appear, when we consider, that it is the Name that seems to preserve those *Essences*, and give them their lasting duration. For the connexion between the loose parts of those complex *Ideas*, being made by the Mind, this union, which has no particular foundation in Nature, would cease again, were there not something that did, as it were, hold it together, and keep the parts from scattering. Though therefore it be the Mind that makes the Collection, 'tis the Name which is, as it were, the Knot, that ties them fast together. What a vast variety of different *Ideas*, does the word *Triumphus* hold together, and deliver to us as one *Species*! Had this Name been never made, or quite lost, we might, no doubt, have had descriptions of what passed in that Solemnity: but yet, I think, that which holds those different parts together, in the unity of one complex *Idea*, is that very word annexed to it: without which, the several parts of that, would no more be thought to make one thing, than any other shew, which having never been made but once, had never been united into one complex *Idea*, under one denomination. How much therefore, in mixed Modes, the Unity necessary to any *Essence*, depends on the Mind; and how much the continuation and fixing of that Unity, depends on the Name in common use annexed to it, I leave to be considered by those who look upon *Essences* and *Species*, as real established Things in Nature.

§. 11. Suitable to this, we find, that Men speaking of mixed Modes, seldom imagine or take any other for *Species* of them, but such as are set out by Names: Because they being of Man's making only, in order to naming, no such *Species* are taken notice of, or supposed to be, unless a Name be joined to it, as the sign of Man's having combined into one

Idea

Idea several loose ones; and by that Name, giving a lasting Union to the Parts, which would otherwise cease to have any, as soon as the Mind laid by that abstract *Idea*, and ceased actually to think on it. But when a Name is once annexed to it, wherein the parts of that complex *Idea* have a settled and permanent Union; then is the Essence, as it were, established, and the Species look'd on as compleat. For to what purpose should the Memory charge it self with such Compositions, unless it were by Abstraction to make them general? And to what purpose make them general, unless it were, that they might have general Names, for the convenience of Discourse, and Communication? Thus we see, that killing a Man with a Sword, or a Hatchet, are looked on as no distinct Species of Action: But if the Point of the Sword first enter the Body, it passes for a distinct Species, where it has a distinct Name, as in *England*, in whose Language it is called *Stabbing*: But in another Country, where it has not happened to be specified under a peculiar Name, it passes not for a distinct Species. But in the Species of corporeal Substances, though it be the Mind that makes the nominal Essence: yet since those *Ideas*, which are combined in it, are supposed to have an Union in Nature, whether the Mind joins them or no, therefore those are looked on as distinct Species, without any operation of the Mind, either abstracting, or giving a Name to that complex *Idea*.

§. 12. Conformable also to what has been said, concerning the *Essences* of the Species of mixed Modes, that they are the Creatures of the Understanding, rather than the Works of Nature: Conformable, I say, to this, we find that *their Names lead our Thoughts to the Mind, and no farther*. When we speak of *Justice*, or *Gratitude*, we frame to our selves no Imagination of any thing existing, which we would conceive; but our Thoughts terminate in the abstract *Ideas* of those Vertues, and look not farther; as they do, when we speak of an *Horse*, or *Iron*, whose specifick *Ideas* we consider not, as barely in the Mind, but as in Things themselves, which afford the original Patterns of those *Ideas*: but in mixed Modes, at least the most considerable part of them, which are moral Beings, we consider the original Patterns, as being in the Mind; and to those we refer for the distinguishing of particular Beings under Names. And hence I think it is, That these Essences of the Species of mixed Modes, are by a more particular Name called *Notions*; as by a peculiar Right, appertaining to the Understanding.

§. 13. This also shews us the Reason, *Why the complex Ideas of mixed Modes, are commonly more compounded, and decomposed, than those of natural Substances*. Because they being the Workmanship of the Understanding, pursuing only its own ends, and the conveniency of expressing in short, those *Ideas* it would make known to another, does with great liberty unite often into one abstract *Idea*, Things that in their Nature have no coherence; and so under one Term, bundle together a great variety of compounded, and decomposed *Ideas*. Thus the Name of *Procession*, what a great mixture of independent *Ideas* of Persons, Habits, Tapers, Orders, Motions, Sounds, does it contain in that complex one, which the Mind of Man has arbitrarily put together, to express by that one Name? Whereas the complex *Ideas* of the sorts of Substances, are usually made up of only a small number of simple ones; and in the Species of Animals, those two, *viz.* Shape and Voice, commonly make the whole nominal Essence.

§. 14. Another thing we may observe from what has been said, is, That the *Names of mixed Modes* always signify (when they have any distinct Signification) the real *Essences of their Species*. For these abstract *Ideas*, being the Workmanship of the Mind, and not referred to the real Existence of Things, there is no supposition of any thing more signified by that Name, but barely that complex *Idea* the Mind it self has formed, which is all it would have express'd by it; and is that, on which all the properties of the Species depend, and from which alone they all flow: and so in these, the real and nominal Essence is the same; which of what Concernment it is to the certain Knowledge of general Truths, we shall see hereafter.

§. 15. This also may shew us the Reason, *Why for the most part the Names of mixed Modes are got, before the Ideas they stand for are perfectly known*. Because there being no Species of these ordinarily taken notice of, but what have Names; and those Species, or rather their Essences, being abstract complex *Ideas*, made arbitrarily by the Mind, it is convenient, if not necessary, to know the Names, before one endeavour to frame these complex *Ideas*: unless a Man will fill his Head with a Company of abstract complex *Ideas*, which others having no Names for, he has nothing to do with, but to lay by, and forget again. I confess, that in the beginning of Languages, it was necessary to have the *Idea*, before one gave it the Name: And so it is still, where making a new complex *Idea*, one also by giving it a new Name, makes a new Word. But this concerns not Languages made, which have generally pretty well provided for *Ideas*, which Men have frequent Occasion to have, and communicate: And in such, I ask, whether it be not the ordinary Method, that Children learn the Names of mixed Modes, before they have their *Ideas*? What one of a thousand ever frames the abstract *Idea* of Glory or Ambition, before he has heard the Names of them. In simple *Ideas* and Substances, I confess it is otherwise; which being such *Ideas*, as have a real Existence and Union in Nature, the *Ideas*, or Names, are gotten one before the other, as it happens.

What has been said here of mixed Modes, is with very little difference applicable also to Relations; which since every Man himself may observe, I may spare my self the Pains to enlarge on: Especially, since what I have here said concerning Words in this Third Book, will possibly be thought by some to be much more than what so slight a Subject required. I allow, it might be brought into a narrower Compass: but I was willing to stay my Reader on an Argument, that appears to me new, and a little out of the way, (I am sure 'tis one, I thought not of, when I began to write,) That by searching it to the bottom, and turning it on every side, some part or other might meet with every one's Thoughts, and give Occasion to the most averse, or negligent, to reflect on a general Mis carriage; which, though of great consequence, is little taken notice of. When it is considered, what a pudder is made about Essences, and how much all sorts of Knowledge, Discourse, and Conversation, are pester'd, and disorder'd by the careless, and confused Use and Application of Words, it will, perhaps, be thought worth while thoroughly to lay it open. And I shall be pardon'd, if I have dwelt long on an Argument, which I think therefore needs to be inculcated; because the Faults, Men are usually guilty of in this kind, are not only the greatest hinderances of true Knowledge; but are so well thought of, as to pass for it. Men would often see what a small pittance of Reason and Truth, or possibly none at all, is mixed with those huffing Opinions they are swell'd with; if they would but look beyond fashionable Sounds, and observe what *Ideas* are, or are not comprehended

comprehended under those words, with which they are so armed at all points, and with which they so confidently lay about them. I shall imagine I have done some Service to Truth, Peace, and Learning, if, by any enlargement on this Subject, I can make Men reflect on their own Use of Language; and give them reason to suspect, that since it is frequent for others, it may also be possible for them, to have sometimes very good and approved Words in their Mouths, and Writings, with very uncertain, little, or no signification. And therefore it is not unreasonable for them to be wary herein themselves, and not to be unwilling to have them examined by others. With this design therefore, I shall go on with what I have farther to say, concerning this matter.

CHAP. VI.

Of the Names of Substances.

§. 1. **T**He common Names of Substances, as well as other general Terms, stand for Sorts: which is nothing else but the being made signs of such complex Ideas, wherein several particular Substances do, or might agree, by virtue of which, they are capable to be comprehended in one common Conception, and be signified by one Name. I say, do or might agree: for though there be but one Sun existing in the World, yet the Idea of it being abstracted, so as that more Substances (if there were several) might each agree in it; it is as much a Sort, as if there were as many Suns, as there are Stars. They want not their Reasons, who think there are, and that each fixed Star, would answer the Idea the name *Sun* stands for, to one who were placed in a due distance. which, by the way, may shew us how much the Sorts, or, if you please, Genera and Species of Things (for those Latin terms signifie to me, no more than the English word *Sort*) depend on such Collections of Ideas, as Men have made; and not on the real Nature of Things: since 'tis not impossible, but that in propriety of Speech, that might be a Sun to one, which is a Star to another.

§. 2. The measure and boundary of each Sort, or Species, whereby it is constituted that particular Sort, and distinguished from others, is that we call its *Essence*, which is nothing but that abstract Idea, to which the Name is annexed: So that every thing contained in that Idea, is essential to that Sort. This, though it be all the Essence of natural Substances, that we know, or by which we distinguish them into Sorts; yet I call it by a peculiar name, the *nominal Essence*, to distinguish it from that real Constitution of Substances, upon which depends this nominal Essence, and all the Properties of that Sort; which therefore, as has been said, may be called the *real Essence*: v. g. the nominal Essence of Gold, is that complex Idea the word Gold stands for, let it be, for instance, a Body yellow, of a certain weight, malleable, fusible, and fixed. But the real Essence, is the constitution of the insensible parts of that Body, on which those Qualities, and all the other Properties of Gold depend. How far these two are different, though they are both called Essence, is obvious, at first sight, to discover.

§. 3.

§. 3. For though, perhaps, voluntary Motion, with Sense and Reason, join'd to a Body of a certain shape, be the complex *Idea*, to which I, and others, annex the name *Man*; and so be the nominal Essence of the Species so called: Yet no body will say, that that complex *Idea*, is the real Essence and Source of all those Operations, are to be found in any Individual of that Sort. The foundation of all those Qualities, which are the Ingredients of our complex *Idea*, is something quite different: And had we such a Knowledge, of that Constitution of Man, from which his Faculties of Moving, Sensation, and Reasoning, and other Powers flow; and on which his so regular shape depends, as 'tis possible Angels have, and 'tis certain his Maker has, we should have a quite other *Idea* of his Essence, than what now is contained in our Definition of that Species, be it what it will: And our *Idea* of any individual Man, would be as far different from what it now is, as is his, who knows all the Springs and Wheels, and other contrivances within, of the famous Clock at *Strasbourg*, is from that which a gazing Country-man has of it, who barely sees the motion of the Hand, and hears the Clock strike, and observes only some of the outward appearances.

§. 4. How much Essence, in the ordinary use of the word, relates to Sorts, and that it is considered in particular Beings, no farther than as they are ranked into Sorts, appears from hence: That take but away the abstract *Ideas*, by which we sort Individuals, and rank them under common Names, and then the thought of any thing essential to any of them, instantly vanishes: we have no notion of the one, without the other: which plainly shews their relation. 'Tis necessary for me to be as I am; GOD and Nature has made me so: But there is nothing I have, is essential to me. An Accident, or Disease, may very much alter my Colour, or Shape; a Fever, or Fall, may take away my Reason, or Memory, or both; and an Apoplex leave neither Sense, nor Understanding, no nor Life. Other Creatures of my shape, may be made with more, and better, or fewer, and worse Faculties than I have: And others may have Reason, and Sense, in a shape and body very different from mine. None of these are essential to the one, or the other, or to any Individual whatsoever, till the Mind refers it to some Sort or Species of Things; and then presently, according to the abstract *Idea* of that Sort, something is found essential. Let any one examine his own Thoughts, and he will find, that as soon as he supposes or speaks of Essential, the consideration of some Species, or the complex *Idea*, signified by some general name, comes into his Mind: And 'tis in reference to that, that this or that Quality is said to be essential; so that if it be asked, whether it be essential to me, or any other particular corporeal Being to have Reason? I say no; nor more than it is essential to this white thing I write on, to have words in it. But if that particular Being, be to be counted of the Sort *Man*, and to have that name *Man* given it, then Reason is essential to it, supposing Reason to be a part of the complex *Idea* the name *Man* stands for: as it is essential to this thing I write on, to contain words, if I will give it the name *Treatise*, and rank it under that Species. So that *essential, and not essential, relate only to our abstract Ideas, and the names annexed to them*; which amounts to no more but this, That whatever particular Thing, has not in it those Qualities, which are contained in the abstract *Idea*, which any general term stands for, cannot be ranked under that Species, nor be called by that name, since that abstract *Idea* is the very essence of that Species.

§. 5. Thus if the *Idea* of *Body*, with some People, be bare Extension, or Space, then Solidity is not *essential* to *Body*: If others make the *Idea*, to which they give the name *Body*, to be Solidity and Extension, then Solidity is *essential* also to *Body*. That therefore, and *that alone* is considered as *essential*, which makes a part of the complex *Idea* the name of a *Sort* stands for, without which, no particular Thing can be reckoned of that *Sort*, nor be entituled to that name. Should there be found a parcel of Matter, that had all the other Qualities that are in *Iron*, but wanted Obedience to the Loadstone; and would neither be drawn by it, nor receive Direction from it, Would any one question, whether it wanted any thing *essential*? It would be absurd to ask, Whether a thing really existing, wanted any Thing *essential* to it. Or could it be demanded, Whether this made an *essential* or *specifick* difference, or no; since we have no other measure of *Essential*, or *Specifick*, but our abstract *Ideas*? And to talk of *specifick* Differences in Nature, without reference to general *Ideas* and Names, is to talk unintelligibly. For I would ask any one, What is sufficient to make an *essential* difference in Nature, between any two particular Beings, without any regard had to some abstract *Idea*, which is looked upon as the *Essence* and Standard of a Species? All such Patterns and Standards, being quite laid aside, particular Beings, considered barely in themselves, will be found to have all their Qualities equally *essential*; and every thing, in each Individual, will be *essential* to it, or, which is more true, nothing at all. For though it may reasonably be asked, Whether obeying the Magnet, be *essential* to *Iron*? yet, I think, it is very improper and insignificant to ask, Whether it be *essential* to that particular parcel of Matter I cut my Pen with, without considering it under the name *Iron*, or as being of a certain Species? And if, as has been said, our abstract *Ideas*, which have names annexed to them, are the Boundaries of Species, nothing can be *essential* but what is contained in those *Ideas*.

§. 6. 'Tis true, I have often mentioned a real *Essence*, distinct in Substances, from those abstract *Ideas* of them, which I call their nominal *Essences*. By this real *Essence*, I mean, that real constitution of any Thing, which is the foundation of all those Properties, that are combined in, and are constantly found to co-exist with the nominal *Essence*; that particular constitution, which every Thing has within it self, without any relation to any thing without it. But *Essence*, even in this sense, relates to a *Sort*, and supposes a Species: For being that real Constitution, on which the Properties depend, it necessarily supposes a sort of Things, Properties belonging only to Species, and not to Individuals: v. g. Supposing the nominal *Essence* of Gold, to be a Body of such a peculiar Colour and Weight, with Malleability and Fusibility, the real *Essence* is that Constitution of the parts of Matter, on which these Qualities, and their Union, depend; and is also the foundation of its Solubility in *Aq. Regia*, and other Properties accompanying that complex *Idea*. Here are *Essences* and Properties, but all upon supposition of a *Sort*, or general abstract *Idea*, which is considered as immutable: but there is no individual parcel of Matter, to which any of these Qualities are so annexed, as to be *essential* to it, or inseparable from it. That which is *essential*, belongs to it as a Condition, whereby it is of this or that *Sort*: But take away the consideration of its being ranked under the name of some abstract *Idea*, and there is nothing necessary to it, nothing inseparable from it. Indeed, as to the real *Essences* of Substances, we only suppose their Being, without precisely knowing what they are: But that which annexes them still

to the Species, is the nominal Essence, of which they are the supposed foundation and cause.

§. 7. The next thing to be considered is, by which of those Essences it is, that *Substances are determined into Sorts, or Species*; and that 'tis evident, is *by the nominal Essence*. For 'tis that alone, that the name, which is the mark of the Sort, signifies. 'Tis impossible therefore, that any thing should determine the Sorts of Things, which we rank under general Names, but that *Idea*, which that Name is design'd as a Mark for; which is that, as has been shewn, which we call the nominal Essence. Why do we say, This is an Horse, and that a Mule; this is an Animal, that an Herb? How comes any particular Thing to be of this or that Sort, but because it has that nominal Essence? Or, which is all one, agrees to that abstract *Idea* that Name is annexed to? And I desire any one but to reflect on his own Thoughts, when he hears or speaks any of those, or other Names of Substances, to know what sort of Essences they stand for.

§. 8. And that the *Species of Things to us, are nothing but the ranking them under distinct Names, according to the complex Ideas in us*; and not according to precise, distinct, real Essences in them, is plain from hence; That we find many of the Individuals that are ranked into one Sort, called by one common Name, and so received as being of one Species, have yet Qualities depending on their real Constitutions, as far different one from another, as from others, from which they are accounted to differ specifically. This, as it is easie to be observed by all, who have to do with natural Bodies; so Chymists especially, are often, by sad Experience, convinced of it, when they, sometimes in vain, seek for the same Qualities in one parcel of Sulphur, Antimony, or Vitriol, which they have found in others. For though they are Bodies of the same Species, having the same nominal Essence, under the same Name; yet do they often, upon severe ways of examination, betray Qualities, so different one from another, as to frustrate the Expectation and Labour of very wary Chymists. But if Things were distinguished into Species, according to their real Essences, it would be as impossible to find different Properties in any two individual Substances of the same Species, as it is to find different Properties in two Circles, or two equilateral Triangles. That is properly the Essence to us, which determines every particular to this or that *Classis*; or, which is the same Thing, to this or that general Name: And what can that be else, but that abstract *Idea*, to which that name is annexed? and so has, in truth, a reference, not so much to the being of particular Things, as to their general Denominations.

§. 9. Nor indeed *can we rank, and sort Things, and consequently (which is the end of sorting) denominate them by their real Essences*, because we know them not. Our Faculties carry us no farther towards the knowledge and distinction of Substances, than a Collection of those sensible *Ideas*, which we observe in them: which however made with the greatest diligence, and exactness we are capable of; yet our complex *Idea* is more remote from the true internal Constitution, from which those Qualities flow, than, as I said, a Countryman's *Idea* is, from the inward contrivance of that famous Clock at *Strasburg*, whereof he only sees the outward Figure and Motions. There is not so contemptible a Plant, or Animal, that does not confound the most enlarged Understanding. Though the familiar use of Things about us, take off our Wonder; yet it cures not our Ignorance. When we come to examine the Stones, we tread on; or the Iron, we daily handle, we presently find, we know

not their Make; and can give no Reason, of the different Qualities we find in them. 'Tis evident the internal Constitution, whereon their properties depend, is unknown to us. For to go no farther than the grossest and most obvious we can imagine amongst them, What is that Texture of Parts? That real Essence, that makes Lead, and Antimony fusible; Wood, and Stones not? What makes Lead, and Iron malleable; Antimony, and Stones not? And yet how infinitely these come short, of the fine Contrivances, and unconceivable real Essences of Plants and Animals, every one knows. The Workmanship of the all-wise, and powerful God, in the great Fabrick of the Universe, and every part thereof, farther exceeds the Capacity and Comprehension of the most inquisitive and intelligent Man; than the best contrivance of the most ingenious Man, doth the Conceptions of the most ignorant of rational Creatures. Therefore we in vain pretend to range Things into sorts, and dispose them into certain Classes, under Names, by their real Essences, that are so far from our Comprehensions. A blind Man may as soon sort Things by their Colours, and he that has lost his Smell, as well distinguish a Lily and a Rose by their Odors, as by those internal Constitutions he knows not. He that thinks he can distinguish Sheep and Goats by their real Essences, that are unknown to him, may be pleased to try his Skill in those Species, called *Cassivary*, and *Querechinbio*; and by their internal real Essences, determine the boundaries of those Species, without knowing the complex *Idea* of sensible Qualities, that each of those Names stands for, in the Countries where those Animals are to be found.

§. 10. Those therefore who have been taught, that the several Species of Substances had their distinct internal *substantial Forms*; and that it was those Forms, which made the distinction of Substances into their true Species and Genera, were led yet farther out of the way, by having their Minds set upon fruitless Enquiries after substantial Forms, wholly unintelligible, and whereof we have scarce so much as any obscure, or confused Conception in general.

§. 11. That our ranking, and distinguishing natural Substances into Species consists in the Nominal Essences the Mind makes, and not in the real Essences to be found in the Things themselves, is farther evident from our Ideas of Spirits. For the Mind getting, only by reflecting on its own Operations, those simple Ideas which it attributes to Spirits, it hath, or can have no other Notion of Spirit, but by attributing all those Operations, it finds in it self, to a sort of Beings, without Consideration of Matter. And even the most advanced Notion we have of God, is but attributing the same simple Ideas we have got from Reflection, on what we find in our selves; and which we conceive to have more Perfection in them, than would be in their absence, attributing, I say, those simple Ideas to him in an unlimited degree. Thus having got from reflecting on our selves, the Idea of Existence, Knowledge, Power, and Pleasure, each of which we find it better to have than to want; and the more we have of each, the better, joining all these together, with infinity to each of them, we have the complex Idea of an eternal, omniscient, omnipotent, infinitely wise, and happy Being. And though we are told, that there are different Species of Angels; yet we know not how to frame distinct specifick Ideas of them; not out of any Conceit, that the Existence of more Species than one of Spirits, is impossible: But because having no more simple Ideas (nor being able to frame more) applicable to such Being, but only those few, taken from our selves, and from the Actions of our own Minds in thinking, and being delighted, and moving several parts

parts of our Bodies; we can no otherwise distinguish in our Conceptions the several Species of Spirits, one from another, but by attributing those Operations and Powers, we find in our selves to them, in a higher or lower degree; and so have neither distinct specifick *Ideas* of Spirits, except only of GOD, to whom we attribute both Duration, and all those other *Ideas* with Infinity; to the other Spirits, with limitation, amongst which, we make no distinction: Nor do we, between GOD and them in our *Ideas*, put any difference by any number of simple *Ideas*, which we have of one, and not of the other, but only that of Infinity. All the particular *Ideas* of Existence, Knowledge, Will, Power, and Motion, &c. being *Ideas* derived from the Operations of our Minds, we attribute all of them to all sorts of Spirits, with the difference only of degrees, to the utmost we can imagine, even Infinity, when we would frame, as well as we can, an *Idea* of the first Being; who yet, 'tis certain, is infinitely more remote in the real Excellency of his Nature, from the highest and perfectest of all created Beings, much more from what our narrow Understandings can conceive of Him, than the greatest Man, nay, purest Seraphim, is from the most contemptible part of Matter.

§. 12. It is not impossible to conceive, nor repugnant to Reason, that there may be many Species of Spirits, as much separated and diversified one from another by distinct Properties, whereof we have no *Ideas*, as the Species of sensible Things are distinguished one from another, by Qualities, which we know, and observe in them. That there should be more Species of intelligent Creatures above us, than there are of sensible and material below us, is probable to me from hence; That in all the visible corporeal World, we see no Chasms, or Gaps. All quite down from us, the descent is by easie steps, and a continued series of Things, that in each remove, differ very little one from the other. There are Fishes that have Wings, and are not Strangers to the airy Region: and there are some Birds, that are Inhabitants of the Water; whose Blood is cold as Fishes, and their Flesh in taste so near akin, that the Scrupulous are allow'd them on Fish-days. There are Animals so near of kin both to Birds and Beasts, that they are in the middle between both: Amphibious Animals link the Terrestrial and Aquatique together; Seales live at Land and at Sea, and Porpoises have the warm Blood and Entrails of an Hog, not to mention what is confidently reported of Mermaids, or Sea-men. There are some Brutes, that seem to have as much Knowledge and Reason, as some that are called Men: and the Animal and Vegetable Kingdoms, are so nearly join'd, that if you will take the lowest of one, and the highest of the other, there will scarce be perceived any great difference between them; and so on till we come to the lowest and the most inorganical parts of Matter, we shall find every-where, that the several Species are linked together, and differ but in almost insensible degrees. And when we consider the infinite Power and Wisdom of the Maker, we have reason to think, that it is suitable to the magnificent Harmony of the Universe, and the great Design and infinite Goodness of the Architect, that the Species of Creatures should also, by gentle degrees, ascend upward from us towards his infinite Perfection, as we see they gradually descend from us downwards: Which if it be probable, we have reason then to be perswaded, that there are far more Species of Creatures above us, than there are beneath; we being, in degrees of Perfection, much more remote from the infinite Being of GOD, than we are from the lowest state of Being, and that which approaches nearest to nothing. And yet of all those distinct Species, for the reasons above-said, we have no *Ideas*.

§. 13. But to return to the Species of corporeal Substances. If I should ask any one, whether Ice and Water were two distinct Species of Things, I doubt not but I should be answered in the affirmative: And it cannot be denied, but he that says they are two distinct Species, is in the right. But if an *English*-man, bred in *Jamaica*, who, perhaps, had never seen nor heard of Ice, coming into *England* in the Winter, find the Water he put in his Basin at night, in a great part frozen in the morning; and not knowing any peculiar name it had, should call it harden'd Water; I ask, Whether this would be a new Species to him, different from Water? And, I think, it would be answered here, It would not to him be a new Species, no more than congealed Gelly, when it is cold, is a distinct Species, from the same Gelly fluid and warm; or than liquid Gold, in the Fornace, is a distinct Species from hard Gold in the Hands of a Workman. And if this be so, 'tis plain, that our *distinct Species*, are nothing but *distinct complex Ideas*, with *distinct Names annexed to them*. 'Tis true, every Substance that exists, has its peculiar Constitution, whereon depend those sensible Qualities, and Powers, we observe in it: But the ranking of Things into Species, which is nothing but sorting them under several Titles, is done by us, according to the *Ideas* that we have of them: Which though sufficient to distinguish them by Names; so that we may be able to discourse of them, when we have them not present before us: yet if we suppose it to be done by their real internal Constitutions, and that Things existing, are distinguished, by Nature, into Species by real Essences, according as we distinguish them into Species by Names, we shall be liable to great Mistakes.

§. 14. To distinguish substantial Beings into Species, according to the usual supposition, that there are certain precise Essences or Forms of Things, whereby all the Individuals existing, are, by Nature, distinguished into Species, these Things are necessary:

§. 15. *First*, To be assured, that Nature, in the production of Things, always designs them to partake of certain regulated established Essences, which are to be the Models of all Things to be produced. This, in that crude sense, it is usually proposed, would need some better explication, before it can fully be assented to.

§. 16. *Secondly*, It would be necessary to know, whether Nature always attains that Essence, it designs in the production of Things. The irregular and monstrous Births, that in divers sorts of Animals have been observed, will always give us reason to doubt of one, or both of these.

§. 17. *Thirdly*, It ought to be determined, whether those we call Monsters, be really a distinct Species, according to the scholastick notion of the word *Species*; since it is certain, that every thing that exists, has its particular Constitution: And yet we find, that some of these monstrous Productions, have few or none of those Qualities, which are supposed to result from, and accompany the Essence of that Species, from whence they derive their Originals, and to which, by their descent, they seem to belong.

§. 18. *Fourthly*, The real Essences of those Things, which we distinguish into Species, and as so distinguished, we name, ought to be known; *i.e.* we ought to have *Ideas* of them. But since we are ignorant in these four points, *the supposed real Essences of Things, stand us not in stead, for the distinguishing Substances into Species.*

§. 19. *Fifthly*, The only imaginable help in this case, would be, that having framed perfect complex *Ideas*, of the Properties of Things, flowing from their different real Essences, we should thereby distinguish them into Species. But neither can this be done: for being ignorant of the real

real Essence it self, it is impossible to know all those Properties, that flow from it, and are so annexed to it, that any one of them being away, we may certainly conclude, that that Essence is not there, and so the Thing is not of that Species. We can never know what are the precise number of Properties, depending on the real Essence of Gold, any one of which failing, the real Essence of Gold, and consequently Gold, would not be there, unless we knew the real Essence of Gold it self, and by that determined that Species. By the Word Gold here, I must be understood to design a particular piece of Matter; *v. g.* the last Guinea that was coin'd. For if it should stand here in its ordinary Signification for that complex *Idea*, which I, or any one else calls Gold; *i. e.* for the nominal Essence of Gold, it would be *Jargon*: so hard is it, to shew the various meaning and imperfection of Words, when we have nothing else but Words to do it by.

§. 20. By all which it is clear, That our *distinguishing Substances into Species* by Names, is not at all founded on their real Essences; nor can we pretend to range, and determine them exactly into Species, according to internal essential differences.

§. 21. But since, as is aforesaid, we have need of general Words, tho' we know not the real Essences of Things; all we can do, is to collect such a number of simple *Ideas*, as by Examination, we find to be united together in Things existing, and thereof to make one complex *Idea*; which though it be not the real Essence of any Substance that exists, is yet *the specifick Essence*, to which our Name belongs, and is convertible with it; by which we may at least try the Truth of these nominal Essences. For Example, there be that say, that the Essence of Body is Extension: If it be so, we can never mistake, in putting the Essence of any thing for the Thing it self. Let us then in Discourse, put *Extension* for *Body*; and when we would say, that Body moves, let us say, that Extension moves, and see how it will look: And he that should say, that one Extension, by Impulse moves another Extension, would, by the bare Expression, sufficiently shew the absurdity of such a Notion. The Essence of any thing, in respect of us, is the whole complex *Idea*, comprehended and marked by that Name; and in Substances, besides the several distinct simple *Ideas* that make them up, the confused one of Substance, or of an unknown Support and Cause of their Union, is always a part: And therefore the Essence of Body is not bare Extension, but an extended solid thing; and so to say, an extended solid thing moves, or impels another, is all one, and as intelligible, as to say, Body moves, or impels. Likewise, to say, that a rational Animal is capable of Conversation, is all one, as to say, a Man. But no one will say, That Rationality is capable of Conversation, because it makes not the whole Essence, to which we give the Name Man.

§. 22. There are Creatures in the World, that have shapes like ours, but are hairy, and want Language, and Reason. There are Naturals amongst us, that have perfectly our shape, but want Reason, and some of them Language too. There are Creatures, as 'tis said, (*sic fides penes Authorem*, but there appears no contradiction, that there should be such,) that with Language, and Reason, and a shape in other Things agreeing with ours, have hairy Tails; others where the Males have no Beards, and others where the Females have. If it be asked, whether these be all *Men*, or no, all of humane Species; 'tis plain, the Question refers only to the nominal Essence: For those to whom the definition of the Word Man, or the complex *Idea*, signified by that Name, agrees, they are Men, and the other

ther not. But if the Enquiry be made concerning the supposed real Essence; and whether the internal Constitution and Frame of these several Creatures be specifically different, it is wholly impossible for us to answer, no part of that going into our specifick *Idea*: only we have Reason to think, that where the Faculties, or outward Frame so much differs, the internal Constitution is not exactly the same: But what difference in the internal real Constitution, makes a specifick difference, is in vain to enquire; whilst *our measures of Species*, be, as they are, *only our abstract Ideas*, which we know; and not that internal Constitution, which makes no part of them. Shall the difference of Hair only on the Skin, be a mark of a different internal specifick Constitution between a Changeling and a Drill, when they agree in Shape, and want of Reason, and Speech? And shall not the want of Reason and Speech, be a sign to us of different real Constitutions and Species, between a Changeling, and a reasonable Man? And so of the rest, if we pretend, that the distinction of Species is fixedly established by the real Frame, and secret Constitutions of Things.

§. 23. Nor let any one say, that the real *Species of Animals*, are distinguished by a Power of *Propagation*, by the mixture of Male and Female, and Plants by Seeds, for this would help us no farther, than in the distinction of the Species of Animals, and Vegetables: What must we do for the rest? Nor is it sufficient in them: For if History lie not, Women have conceived by Drills; and what real Species, by that measure, such a Production will be in Nature, will be a new Question; and we have Reason to think this not impossible, since Mules, and Gimers, the one from the mixture of an Horse, and an Ass, the other from the mixture of a Bull, and a Mare, are so frequent in the World. I once saw a Creature, that was the Issue of a Cat, and a Rat, and had the plain marks of both about it; wherein Nature appear'd to have followed the pattern of neither sort alone, but to have jumbled them both together.

§. 24. Upon the whole matter, 'tis evident, that 'tis their own Collections of sensible Qualities, that Men make the Essences of their several sorts of Substances; and that their real internal Structures, are not considered by the greatest part of Men, in the sorting them; much less any *substantial Forms* were ever thought on by any, but those who have in this one part of the World, learned the Language of the Schools: and yet those ignorant Men, who pretend not any insight into the real Essences, nor trouble themselves about substantial Forms, but are content with knowing Things one from another, by their sensible Qualities, are often better acquainted with their Differences; can more nicely distinguish them for their uses; and better know what they may expect from each, than those learned quick-sighted Men, who look so deep into them; and talk so confidently of something more hidden and essential.

§. 25. But supposing that the real Essences of Substances were discoverable, by those, that would severely apply themselves to that Enquiry; yet we could not reasonably think, that the *ranking of Things under general Names*, was regulated by those internal real Constitutions, or any thing else but *their obvious appearances*: Since Languages, in all Countries, have been established long before Sciences; so that they have not been Philosophers, or Logicians, or such who have troubled themselves about Forms and Essences, that have made the general Names, that are in use amongst the several Nations of Men: But those, more or less comprehensive terms, have, for the most part, in all Languages, received their Birth and Signification, from ignorant and illiterate People; who sorted and
denominated

denominated Things, by those sensible Qualities they found in them, thereby to signify them, when absent to others, whether they had an occasion to mention a Sort, or a particular Thing.

§. 25. Since then it is evident, that we sort and name Substances by their *nominal*, and not by their real Essences, the next thing to be considered is, how, and by whom these *Essences* come to be made. As to the latter, 'tis evident they are made by the *Mind*, and not by Nature: For were they Nature's Workmanship, they could not be so various and different in several Men, as 'tis evident they are. For if we will examine it, we shall not find the nominal Essence of any one Species of Substances, in all Men the same; no not of that, which of all others we are the most intimately acquainted with. It could not possibly be, that the abstract *Idea*, to which the name *Man* is given, should be different in several Men, if it were of Nature's making; and that to one it should be *Animal rationale*, and to another *Animal implume bipes latis unguibus*. He that annexes the name *Man*, to a complex *Idea*, made up of Sense and spontaneous Motion, join'd to a Body of such a shape, has thereby one Essence of the Species *Man*: And he that, upon farther examination, adds Rationality, has another Essence of the Species he calls *Man*: By which means, the same Individual will be a true *Man* to the one, which is not so to the other. I think, there is scarce any one will allow this upright Figure, so well known, to be the essential difference of the Species *Man*; and yet how far Men determine of the sorts of Animals, rather by their Shape, than Descent, is very visible; since it has been more than once debated, whether several humane *Fœtus* should be preserved, or received to Baptism, or no, only because of the difference of their outward Configuration, from the ordinary Make of Children, without knowing whether they were not as capable of Reason, as Infants cast in another Mold: Some whereof, though of an approved shape, are never capable of as much appearance of Reason, all their Lives, as is to be found in an Ape, or an Elephant; and never give any signs of being acted by a rational Soul. Whereby it is evident, that the outward Figure, which only was found wanting, and not the Faculty of Reason, which no body could know would be wanting in its due season, was made essential to the humane Species. The learned Divine and Lawyer, must, on such occasions, renounce his sacred Definition of *Animal Rationale*, and substitute some other Essence of the humane Species.

§. 26. Wherein then, would I gladly know, consists the precise and unmovable Boundaries of that Species? 'Tis plain, if we examine, there is no such thing made by Nature, and established by Her amongst Men. The real Essence of that, or any other sort of Substances, 'tis evident we know not: and therefore are so undetermined in our nominal Essences, which we make our selves, that if several Men were to be asked, concerning some oddly-shaped *Fœtus*, as soon as born, whether it were a Man, or no; 'tis past doubt, one should meet with different Answers: Which could not happen, if the nominal Essences, whereby we limit and distinguish the Species of Substances, were not made by Man, with some liberty; but were exactly copied from precise Boundaries set by Nature, whereby it distinguish'd all Substances into certain Species. Who would undertake to resolve, what Species that Monster was of, which is mentioned by *Licetus, lib. 1. c. 3.* with a Man's Head, and Hog's Body? Or those other, which to the Bodies of Men, had the Heads of Beasts, as Dogs, Horses, &c. If any of these Creatures had lived, and could have spoke, it would have increased the difficulty. Had the upper part, to the middle, been of humane shape, and

all below Swine; Had it been Murther to destroy it? Or must the Bishop have been consulted, whether it were Man enough to be admitted to the Font, or no? As I have been told it happen'd in *France* some years since, in somewhat a like case. So uncertain are the Boundaries of Species of Animals to us, who have no other measures, than the complex *Ideas* of our own collecting: And so far are we from certainly knowing what a Man is; though, perhaps, it will be judged great ignorance, to make any doubt about it. And yet, I think, I may say, that the certain Boundaries of that Species, are so far from being determined, and the precise number of simple *Ideas*, which make that nominal Essence, so far from being settled, and perfectly known, that very material Doubts may still arise about it: And I imagine, none of the Definitions, of the word *Man*, we yet have, nor Descriptions of that sort of Animal, so perfect and exact, as to satisfy a considerate inquisitive person; much less to obtain a general Consent, and to be that which Men would everywhere stick by, in the Decision of Cases, and determining of Life and Death, Baptism or no Baptism, in Productions that might happen.

§. 27. But though these *nominal Essences of Substances* are made by the Mind, they are *not yet made so arbitrarily, as those of mixed Modes*. To the making of any nominal Essence, it is necessary, *First*, That the *Ideas* whereof it consists, have such an union, as to make but one *Idea*, how compounded soever. *Secondly*, That the particular *Ideas* so united, be exactly the same, neither more nor less. For if two abstract complex *Ideas*, differ either in number, or sorts, of their component parts, they make two different, and not one and the same Essence. In the first of these, the Mind, in making its complex *Ideas* of Substances, only follows Nature; and puts none together, which are not supposed to have an union in Nature. No body joins the Voice of a Sheep, with the Shape of an Horse; nor the Colour of Lead, with the Weight and Fixedness of Gold, to be the complex *Ideas* of any real Substances; unless he has a mind to fill his head with *Chimæra's*, and his Discourse with unintelligible Words. Men, observing certain Qualities always join'd and existing together, therein copied Nature; and of *Ideas* so united, made their complex ones of Substances. For though Men may make what complex *Ideas* they please, and give what names to them they will; yet if they will be understood, when they speak of Things really existing, they must, in some degree, conform their *Ideas*, to the Things they would speak of: Or else Mens Language will be like that of *Babel*; and every Man's Words, being intelligible only to himself, would no longer serve to Conversation, and the ordinary Affairs of Life, if the *Ideas* they stand for, be not some way answering the common appearances, and agreement of Substances, as they really exist.

§. 28. *Secondly*, Though the Mind of Man, in making its complex *Ideas* of Substances, never puts any together, that do not really, or are not supposed to co-exist; and so it truly borrows that Union from Nature: Yet the Number it combines, depends upon the various Care, Industry, or Fancy of him that makes it. Men generally content themselves with some few sensible obvious Qualities; and often, if not always, leave out others as material, and as firmly united, as those that they take. Of sensible Substances, there are two sorts; one of organiz'd Bodies, which are propagated by Seeds; and in these, the Shape is that, which to us is the leading Quality, and most characteristical Part, that determines the Species: And therefore in Vegetables and Animals, an extended solid Substance of such, a certain Figure usually serves the turn. For however some Men
seem

seem to prize their Definition of *Animal Rationale*, yet should there a Creature be found, that had Language and Reason, but partaked not of the usual shape of a Man, I believe it would hardly pass for a Man, how much soever it were *Animal Rationale*. And if Baalam's Ass had, all his Life, discoursed as rationally, as he did once with his Master, I doubt yet, whether any one would have thought him worthy the name Man, or allow'd him to be of the same Species with himself. As in Vegetables and Animals 'tis the Shape, so in most other Bodies, not propagated by Seed, 'tis the Colour we most fix on, and are most led by. Thus where we find the Colour of Gold, we are apt to imagine all the other Qualities, comprehended in our complex *Idea*, to be there also: and we commonly take these two obvious Qualities, *viz.* Shape and Colour, for so presumptive *Ideas* of several Species, that in a good Picture, we readily say, this is a Lion, and that a Rose; this is a Gold, and that a Silver Goblet, only by the different Figures and Colours, represented to the Eye by the Pencil.

§. 29. But though this serves well enough for gross and confused Conceptions, and unaccurate ways of Talking and Thinking; yet *Men are far enough from having agreed on the precise number of simple Ideas, or Qualities, belonging to any sort of Things, signified by its name.* Nor is it a wonder, since it requires much time, pains, and skill, strict enquiry, and long examination, to find out what, and how many those simple *Ideas* are, which are constantly and inseparably united in Nature, and are always to be found together in the same Subject. Most Men, wanting either Time, Inclination, or Industry enough for this, even to some tolerable degree, content themselves with some few obvious, and outward appearances of Things, thereby readily to distinguish, and sort them for the common Affairs of Life: And so, without farther examination, give them names, or take up the names already in use. Which though in common Conversation, they pass well enough for the signs of some few obvious Qualities co-existing, are yet far enough from comprehending, in a settled signification, a precise number of simple *Ideas*; much less all those, which are united in Nature. He that shall consider, after so much stir, about *Genus* and *Species*, and such a deal of talk of specifick Differences, how few Words we have yet settled Definitions of, may, with Reason, imagine, that those Forms, there hath been so much noise made about, are only *Chimæras*; which give us no light into the specifick Natures of Things. And he that shall consider, how far the names of Substances are from having Significations, wherein all who use them do agree, will have reason to conclude, that though the nominal Essences of Substances, are all supposed to be copied from Nature; yet they are all, or most of them, very imperfect. Since the composition of those complex *Ideas*, are, in several Men, very different: and therefore, that these Boundaries of Species, are as Men, and not as Nature makes them, if at least there are in Nature any such prefixed bounds. 'Tis true, that many particular Substances are so made by Nature, that they have agreement and likeness one with another, and so afford a foundation of being ranked into Sorts. But the sorting of Things by us, or the making of determinate Species, being in order to naming and comprehending them under general terms, I cannot see how it can be properly said, that Nature sets the Boundaries of the Species of Things: Or if it be so, our Boundaries of Species, are not exactly conformable to those in Nature. For we, having need of general names for present use, stay not for a perfect discovery of all those Qualities, which would best shew us their most material differences and agree-

ments ; but we our selves divide them, by certain obvious appearances, into Species, that we may the easier, under general names, communicate about them. For having no other knowledge of any Substance, but of the simple *Ideas*, that are united in it ; and observing several particular Things, to agree with others, in several of those simple *Ideas*, we make that collection our specifick *Idea*, and give it a general name ; that in recording our own Thoughts, and Discourse with others, we may, in one short word, design all the Individuals that agree in that complex *Idea*, without enumerating the simple *Ideas*, that make it up ; and so not waste our Time and Breath in tedious Descriptions : which we see they are fain to do, who would discourse of any new sort of Things, they have not yet a name for.

§. 30. But however, these Species of Substances pass well enough in ordinary Conversation, it is plain enough, that this complex *Idea*, wherein they observe several Individuals to agree, is, by different Men, made very differently ; by some more, and others less accurately. In some, this complex *Idea* contains a greater, and in others a smaller number of Qualities ; and so is apparently such as the Mind makes it. The yellow shining colour, makes Gold to Children ; others add Weight, Malleableness, and Fusibility ; and others yet other Qualities, they find joined with that yellow Colour, as constantly as its Weight or Fusibility. For in all these, and the like Qualities, one has as good a right to be put into the complex *Idea* of that Substance, wherein they are all join'd, as another. And therefore *different Men* leaving out, or putting in several simple *Ideas*, which others do not, according to their various Examination, Skill, or Observation of that subject, have *different Essences of Gold* ; which must therefore be of their own, and not of Nature's making.

§. 31. If the number of simple *Ideas*, that make the nominal Essence of the lowest Species, or first sorting of Individuals, depend on the Mind of Man, variously collecting them, it is much more evident, that they do so, in the more comprehensive *Classes*, which ; by the Masters of Logick, are called *Genera*, which are complex *Ideas* designedly imperfect ; out of which, are purposely left out several of those Qualities, that are to be found in the Things themselves. For as the Mind, to make general *Ideas*, comprehending several particulars, leaves out those of Time, and Place, and such other, that make them incommunicable to more than one Individual, so to make other yet more general *Ideas*, that may comprehend different sorts, it leaves out those Qualities, that distinguish them, and puts into its new Collection, only such *Ideas*, as are common to several sorts. The same convenience that made Men express several parcels of yellow Matter coming from *Guiny*, and *Pern*, under one name, sets them also upon making of one name, that may comprehend both Gold, and Silver, and some other Bodies of different sorts, which it does by the same way of leaving out those Qualities, which are peculiar to each sort ; and retaining a complex *Idea*, made up of those, that are common to each Species : to which the name *Metal* being annexed, there is a *Genus* constituted ; the Essence whereof being that abstract *Idea*, containing only Malleableness and Fusibility, with certain degrees of Weight and Fixedness, wherein Bodies of several kinds agree, leaves out the Colour, and other Qualities peculiar to Gold, and Silver, and the other sorts comprehended under the name *Metal*. Whereby it is plain, that Men follow not exactly the Patterns set them by Nature, when they make their general *Ideas* of Substances ; since there is no Body to be found, which has barely Malleableness and Fusibility in it, without other Qualities as inseparable as those.

But

But Men, in making their general *Ideas*, seeking more the convenience of Language, and quick dispatch, by short and comprehensive signs, than the true and precise Nature of Things, as they exist, have, in the framing their abstract *Ideas*, chiefly pursued that end, which was to be furnished with store of general, and variously comprehensive Names. So that in this whole business of *Genera* and *Species*, the *Genus*, or more comprehensive, is but a partial conception of what is in the *Species*, and the *Species*, but a partial *Idea* of what is to be found in each Individual. If therefore any one will think, that a Man, and an Horse, and an Animal, and a Plant, &c. are distinguished by real Essences made by Nature, he must think Nature to be very liberal of these real Essences, making one for Body, another for an Animal, and another for an Horse; and all these Essences liberally bestowed upon *Bucephalus*. But if we would rightly consider what is done, in all these *Genera* and *Species*, or Sorts, we should find, that there is no new Thing made, but only more or less comprehensive signs; whereby we may be enabled to express, in a few syllables, great number of particular Things, as they agree in more or less general conceptions, which we have framed to that purpose. In all which, we may observe, that the more general term, is always the name of a less complex *Idea*; and that each *Genus*, is but a partial conception of the *Species* comprehended under it. So that if these abstract general *Ideas*, be thought to be complete, it can only be in respect of a certain established relation, between them and certain names, which are made use of to signify them; and not in respect of any thing existing, as made by Nature.

§. 32. This is adjusted to the true end of Speech, which is to be the easiest and shortest way of communicating our Notions. For thus he, that would make and discourse of Things, as they agreed in the complex *Idea* of Extension and Solidity, needed but use the word *Body*, to denote all such. He that, to these, would join others, signified by the words *Life*, *Sense*, and spontaneous Motion, needed but use the word *Animal*, to signify all which partaked of those *Ideas*: and he that had made a complex *Idea* of a Body, with Life, Sense, and Motion, with the Faculty of Reasoning, and a certain Shape joined to it, needed but use the short monosyllable *Man*, to express all particulars that corresponded to that complex *Idea*. This is the proper business of *Genus* and *Species*: and this Men do, without any consideration of real Essences, or substantial Forms, which come not within the reach of our Knowledge, when we think of those Things; nor within the signification of our Words, when we discourse with others.

§. 33. Were I to talk with any one, of a Sort of Birds, I lately saw in St. James's Park, about three or four foot high, with a Covering of something between Feathers and Hair, of a dark brown colour, without Wings, but in the place thereof, two or three little branches, coming down like sprigs of Spanish Broom; long great Legs, with Feet only of three Claws, and without a Tail; I must make this description of it, and so may make others understand me: But when I am told, that the name of it is *Cassuaris*, I may then use that word to stand in discourse for all my complex *Idea* mentioned in that description; though by that word, which is now become a specific name, I know no more of the real Essence, or Constitution of that sort of Animals, than I did before; and knew probably as much of the nature of that Species of Birds, before I learn'd the name, as many English-men do of Swans, or Herons, which are specific names, very well known of sorts of Birds common in England.

§. 34. From what has been said, 'tis evident, that *Men make sorts of Things*. For it being different Essences alone, that make different Species, 'tis plain, that they who make those abstract *Ideas*, which are the nominal Essences, do thereby make the Species, or Sort. Should there be a Body found, having all the other Qualities of Gold, except Malleableness, 'twould, no doubt, be made a question, whether it were Gold, or no; whether it were of that Species. This could be determined only by that abstract *Idea*, to which every one annexed the name Gold: so that it would be true Gold to him, and belong to that Species, who included not Malleableness in his nominal Essence, signified by the sound Gold; and on the other side, it would not be true Gold, or of that Species to him, who included Malleableness in his specifick *Idea*. And who, I pray, is it, that makes these divers Species, even under one and the same name, but Men that make two different abstract *Ideas*, consisting not exactly of the same collection of Qualities? Nor is it a mere Supposition to imagine, that a Body may exist, wherein the other obvious Qualities of Gold may be without Malleableness; since it is certain, that Gold it self will be sometimes so eager, (as Artists call it,) that it will as little endure the Hammer, as Glais it self. What we have said, of the putting in, or leaving out of Malleableness out of the complex *Idea*, the name *Gold* is, by any one, annexed to, may be said of its peculiar Weight, Fixedness, and several other the like Qualities: For whatever is left out, or put in, 'tis still the complex *Idea*, to which that name is annexed, that makes the Species: and as any particular parcel of Matter answers that *Idea*, so the name of the Sort belongs truly to it; and it is of that Species. And thus any thing is true *Gold*, perfect *Metal*. All which determination of the Species, 'tis plain, depends on the Understanding of Man, making this or that complex *Idea*.

§. 35. This then, in short, is the case: *Nature makes many particular Things, which do agree*, one with another, in many sensible Qualities, and probably too, in their internal frame and constitution: But 'tis not this real Essence, that distinguishes them into Species; 'tis Men, who, taking occasion from the Qualities they find united in them, and wherein they observe often, several individuals to agree, *range them into Sorts, in order to their naming*, for the convenience of comprehensive signs; under which particular, Individuals, according to their conformity to this or that abstract *Idea*, come to be ranked, as under Ensigns: so that this is of the Blew, that the Red Regiment; this is a Man, that a Drill: And in this, I think, consists the whole business of *Genus* and *Species*.

§. 36. I do not deny, but Nature, in the constant production of particular Beings, makes them not always new and various, but very much alike and of kin one to another: But I think it is nevertheless true, that *the Boundaries of the Species, whereby Men sort them, are made by Men*; since the Essences of the Species, distinguished by different names, are, as has been proved, of Man's making, and seldom adequate to the internal Nature of the Things they are taken from. So that we may truly say, such a manner of sorting of Things, is the Workmanship of Men.

§. 37. One thing, I doubt not, but will seem very strange in this Doctrine; which is, that, from what has been said, it will follow, that *each abstract Idea, with a name to it, makes a distinct Species*. But who can help it, if Truth will have it so? For so it must remain, till some body can shew us the Species of Things, limited and distinguished by something else; and let us see, that general terms signifie not our abstract *Ideas*, but something different from them. I would fain know, why a Shock,

Shock, and a Hound, are not as distinct Species, as a Spaniel, and an Elephant. We have no other *Idea* of the different Essence of an Elephant and a Spaniel, than we have of the different Essence of a Shock and an Hound; all the essential difference, whereby we know and distinguish them one from another, consisting only in the different Collection of simple *Ideas*, to which we have given those different names.

§. 38. How much *the making of Species and Genera is in order to general Names*, and how much general Names are necessary, if not to the Being, yet at least to the Completing of a Species, and making it pass for such, will appear, besides what has been said, above, concerning Ice and Water, in a very familiar example. A silent, and a striking Watch, are but one Species, to those who have but one name for them: but he that has the name *Watch* for one, and *Clock* for the other, and distinct complex *Ideas*, to which those Names belong, to him they are different Species. But it will be said, the inward contrivance and constitution, is different between these two, which the Watch-maker has a clear *Idea* of: And yet, 'tis plain, they are but one Species to him, when he has but one name for them. For what is sufficient in the inward Contrivance, to make a new Species? There are some Watches, that are made with four Wheels, others with five: Is this a specifick difference to the Workman? Some have Strings and Physies, and others none; some have the Balance loose, and others regulated by a spiral Spring, and others by Hogs Bristles: Are any, or all of these, enough to make a specifick difference to the Workman, that knows each of these, and several other different Contrivances, in the internal Constitutions of Watches? 'Tis certain, each of these hath a real difference from the rest; but whether it be an essential, a specifick difference, or no, relates only to the complex *Idea*, to which the name Watch is given: as long as they all agree in the *Idea* that belongs to that name, which has no Species under it, they are not essentially nor specifically different. But if any one will make minuter Divisions from Differences, that he knows in the internal frame of Watches; and to such precise complex *Ideas*, give names, that shall prevail: they will then be new Species to them, who have those *Ideas*, with names to them; and can, by those differences, distinguish Watches into these several sorts, and then Watches will be a generical name. But yet they would be no distinct Species to Men ignorant of Clock-work, and the inward Contrivances of Watches; who had no other *Idea*, but the outward shape and bulk, with the marking of the Hours by the Hand: For to them, all those other Names would be but synonymous Terms for the same *Idea*, and signifie no more, nor no other thing but a Watch. Just thus, I think, it is in natural Things. No body will doubt, that the Wheels, or Springs (if I may so say) within, are different in a *rational Man*, and a *Changeling*, no more than that there is a difference in the frame between a *Drill*, and a *Changeling*. But whether one, or both these differences be essential, or specifick, is only to be known to us, by their agreement, or disagreement with the complex *Idea* that the name *Man* stands for: For by that alone can it be determined, whether one, or both, or neither of those be a Man, or no.

§. 39. From what has been before said, we may see the reason, *why, in the Species of artificial Things, there is generally less confusion and uncertainty, than in natural*. Because an artificial Thing being a production of Man, which the Artificer design'd, and therefore well knows the *Idea* of, the name of it is supposed to stand for no other *Idea*, nor to import any other Essence, than what is certainly to be known, and easie enough

to be apprehended. For the *Idea*, or Essence, of the several sorts of artificial Things, consisting, for the most part, in nothing but the determinate Figure of sensible Parts; and sometimes Motion depending thereon, which the Artificer fashions in Matter, such as he finds for his Turn, it is not beyond the reach of our Faculties to attain a certain *Idea* thereof; and so settle the signification of the Names, whereby the Species of artificial Things are distinguished, with less Doubt, Obscurity, and Equivocation, than we can in Things natural, whose differences and Operations depend upon Contrivances, beyond the reach of our Discoveries.

§. 40. I must be excused here, if I think, *artificial Things are of distinct Species*, as well as natural: Since I find they are as plain, and orderly ranked into sorts, and have distinct complex *Ideas*, to which we give general Names, as much distinct one from another, as natural Substances. For why should we not think a Watch, and Pistol, as distinct Species one from another, as a Horse, and a Dog, they being expressed in our Minds by distinct *Ideas*, and to others, by distinct Appellations?

§. 41. This is farther to be observed concerning *Substances*, that they alone of all our several sorts of *Ideas*, have particular, or proper Names, whereby one only particular Thing is signified. Because in simple *Ideas*, Modes, and Relations, it seldom happens, that Men have occasion to mention often this, or that particular, when it is absent. Besides the greatest part of mixed Modes, being Actions, which perish in their Birth, are not capable of a lasting Duration, as Substances, which are the Actors; and wherein the complex *Ideas*, designed by that Name, have a lasting Union.

§. 42. I must beg Pardon of my Reader, for having dwelt so long upon this Subject, and perhaps, with some Obscurity. But I desire, it may be considered, how difficult it is, to lead another by Words into the Thoughts of Things, stripp'd of those specifical differences we give them: Which Things, if I name not, I say nothing; and if I do name them, I thereby rank them into some sort, or other, and suggest to the Mind the usual abstract *Idea* of that Species; and so cross my purpose. For to talk of a *Man*, and to lay by, at the same time, the ordinary signification of the Name *Man*, which is our complex *Idea*, usually annexed to it; and bid the Reader consider *Man*, as he is in himself, and whereby he is really distinguished from others, in his internal Constitution, or real Essence; that is, by something, he knows not what, looks like trifling; and yet thus one must do, who would speak of the supposed real Essences and Species of Things, as thought to be made by Nature, if it be but only to make it understood, that there is no such thing signified by the general Names, Substances are call'd by. But because it is difficult by known familiar Names to do this, give me leave to endeavour by an Example, to make the different Consideration, the Mind has of specifick Names and *Ideas*, a little more clear; and to shew how the complex *Ideas* of Modes, are refer'd sometimes to Archetypes in the Minds of other intelligent Beings; or which is the same, to the signification annexed by others, to their receive Names; and sometimes, to no Archetypes at all. Give me leave also to shew how the Mind always refers its *Ideas* of Substances, either to the Substances themselves, or to the signification of their Names, as to their Archetypes; and also to make plain the Nature of Species, or sorting of Things, as apprehended, and made use of by us; and of the Essences belonging to those Species, which is, perhaps, of more Moment, to discover the Extent and Certainty of our Knowledge, than we at first imagine.

§. 43. Let us suppose *Adam* in the State of a grown Man, with a good Understan-

derstanding, but in a strange Country, with all Things new, and unknown about him; and no other Faculties, to attain the Knowledge of them, but what one of this Age has now. He observes *Lamech* more melancholy than usual, and imagines it to be from a suspicion he has of his Wife *Adah*, whom he most ardently loved, that she had too much Kindness for another Man. *Adam* discourses these his Thoughts to *Eve*, and desires her to take care that *Adah* commit not Folly: And in these Discourses with *Eve*, he makes use of these two new Words, *Kinneah* and *Niouph*. In time, *Adam's* mistake appears, for he finds *Lamech's* Trouble proceeded from having kill'd a Man: But yet the two Names, *Kinneah* and *Niouph*; the one standing for suspicion in a Husband, of his Wife's Disloyalty to him; and the other, for the Act of committing Disloyalty. It is plain then, that here were two distinct complex *Ideas* of mixed Modes, with Names to them, two distinct Species of Actions essentially different, I ask wherein consist the Essences of these two distinct Species of Actions, and 'tis plain, it consisted in a precise Combination of simple *Ideas*, different in one from the other. I ask, whether the complex *Idea* in *Adam's* Mind, which he call'd *Kinneah*, were adequate, or no? And it is plain it was, for it being a Combination of simple *Ideas*, which he without regard to any Archetype, without respect to any thing as a Pattern, voluntarily put together, abstracted and gave the Name *Kinneah* to, to express in short to others, by that one sound, all the simple *Ideas* contained and united in that complex one, it must necessarily follow, that it was an adequate *Idea*. His own choice having made that Combination, it had all in it he intended it should, and so could not but be perfect, could not but be adequate, it being referr'd to no other Archetype, which it was supposed to represent.

§. 44. These Words, *Kinneah* and *Niouph*, by degrees grew into common use; and then the case was somewhat altered. *Adam's* Children had the same Faculties, and thereby the same Power, that he had, to make what complex *Ideas* of mixed Modes they pleased in their own Minds; to abstract them; and make what Sounds they pleased, the Signs of them: But the use of Names, being to make our *Ideas* within us known to others, that cannot be done, but when the same Sign stands for the same *Idea* in two, who would communicate their Thoughts and Discourse together. Those therefore of *Adam's* Children, that found these two Words, *Kinneah* and *Niouph*, in familiar use, could not take them for insignificant sounds: but must needs conclude, they stood for something, for certain *Ideas*, abstract *Ideas*, they being general Names, which abstract *Ideas* were the Essences of the Species, distinguished by those Names. If therefore they would use these Words, as Names of Species, already established and agreed on, they were obliged to conform the *Ideas* in their Minds, signified by these Names, to the *Ideas* that they stood for in other Men's Minds, and to conform their *Ideas* to them, as to their Patterns and Archetypes; and then indeed their *Ideas* of these complex Modes, were liable to be inadequate, as being very apt (especially those that consisted of Combinations of many simple *Ideas*) not to be exactly conformable to the *Ideas* in other Men's Minds, using the same Names; though for this, there be usually a Remedy at Hand, which is, to ask the meaning of any Word we understand not, of him that uses it: it being as impossible, to know certainly, what the Words Jealousie and Adultery (which I think answer קנאה and נאוף) stand for in another Man's Mind, with whom I would discourse about them; as it was impossible, in the beginning of Language, to know what *Kinneah* and *Niouph* stood for in

another Man's Mind, without Explication, they being voluntary Signs in every one.

§. 45. Let us now also consider after the same manner, the Names of Substances, in their first Application. One of *Adam's* Children, roving in the Mountains, lights on a glittering Substance, which pleases his Eyes; Home he carries it to *Adam*, who upon Consideration of it, finds it to be hard, to have a bright yellow Colour, and an exceeding great Weight. These, perhaps, at first, are all the Qualities, he takes notice of in it, and abstracting this complex *Idea*, consisting of a Substance, having that peculiar bright Yellowness, and a Weight very great in proportion to its Bulk, he gives it the Name *Zahab*, to denominate, and mark all Substances, that have these sensible Qualities in them. 'Tis evident now, that in this Case, *Adam* acts quite differently from what he did before, in forming those *Ideas* of mixed Modes, to which he gave the Name *Kinneah* and *Niouph*; for there he put *Ideas* together, only by his own Imagination, not taken from the Existence of any thing; and to them he gave Names to denominate all Things, that should happen to agree to those his abstract *Ideas*, without considering whether any such thing did exist, or no: the Standard there was of his own making. But in the forming his *Idea* of this new Substance, he takes the quite contrary Course; here he has a Standard made by Nature; and therefore being to represent that to himself, by the *Idea* he has of it, even when it is absent, he puts in no simple *Idea* into his complex one, but what he has the Perception of from the thing it self. He takes Care that his *Idea* be conformable to this Archetype, and intends the Name should stand for an *Idea* so conformable.

§. 46. This piece of Matter, thus denominated *Zahab* by *Adam*, being quite different from any he had seen before, no Body, I think, will deny to be a distinct Species, and to have its peculiar Essence; and that the Name *Zahab* is the mark of the Species, and a Name belonging to all Things partaking in that Essence. But here it is plain, the Essence *Adam* signified, and made the Name *Zahab* stand for, was nothing but a Body hard, shining, yellow, and very heavy. But the inquisitive Mind of Man, not content with the Knowledge of these, as I may say, superficial Qualities, puts *Adam* upon farther Examination of this Matter. He therefore knocks, and beats it with Flints, to see what was discoverable in the inside: He finds it yield to Blows, but not easily separate into pieces: he finds it will bend without breaking. Is not now Ductility to be added to his former *Idea*, and the Essence of the Species that Name *Zahab* stands for? Farther Trials discover Fusibility, and Fixedness, Are not they also, by the same Reason, that any of the others were, to be put into the complex *Idea*, signified by the Name *Zahab*? If not, What Reason will there be shewed more for the one than the other? If these must, then all the other Properties, which any farther Trials shall discover in this Matter, ought by the same Reason to make a part of the Ingredients of the complex *Idea*, which the Name *Zahab* stands for; and so be the Essence of the Species, marked by that Name; which Properties, because they are endless, it is plain, that the *Idea* made after this Fashion by this Archetype, will be always inadequate.

§. 47. But this is not all, it would also follow, that the Names of Substances would not only have, (as in Truth they have) but would also be supposed to have different Significations, as used by different Men, which would very much cumber the use of Language. For if every distinct Quality, that were discovered in any Matter by any one, were supposed

to make a necessary part of the complex *Idea*, signified by the common Name given it, it must follow, that Men must suppose the same Word to signify different Things in different Men: Since they cannot doubt, but different Men may have discovered several Qualities in Substances of the same Denomination, which others know nothing of.

§ 48. To avoid this therefore, they have *supposed a real Essence, belonging to every Species*, from which these Properties all flow, and would have their name of the Species stand for that: But they not having any *Idea* of that real Essence in Substances, and their Words signifying nothing but the *Ideas* they have, that which is done by this Attempt, is only to put the name or sound, in the place and stead of the thing having that real Essence, without knowing what that real Essence is; and this is that which Men do, when they speak of Species of Things, as supposing them made by Nature, and distinguished by real Essences.

§ 49. For let us consider, when we affirm, that all Gold is fixed, either it means that Fixedness is a part of the Definition, part of the nominal Essence the Word Gold stands for; and so this Affirmation, all Gold is fixed, contains nothing but the signification of the Term Gold. Or else it means, that Fixedness not being a part of the definition of the Word Gold, is a Property of that Substance it self: in which Case, it is plain, that the Word Gold stands in the place of a Substance, having the real Essence of a Species of Things, made by Nature; in which way of Substitution, it has so confused and uncertain a Signification, that though this Proposition, Gold is fixed, be in that sense an Affirmation of something real; yet 'tis a Truth will always fail us in its particular Application, and so is of no real Use nor Certainty. For let it be never so true, that all Gold, *i. e.* all that has the real Essence of Gold, is fixed, What serves this for, whilst we know not in this sense, what is or is not Gold? For if we know not the real Essence of Gold, 'tis impossible we should know what parcel of Matter has that Essence, and so whether it be true Gold or no.

§ 50. To conclude; what liberty *Adam* had at first to make any complex *Ideas* of mixed Modes, by no other Pattern, but by his own Thoughts, the same have all Men ever since had. And the same necessity of conforming his *Ideas* of Substances to Things without him, as to Archetypes made by Nature, that *Adam* was under, if he would not wilfully impose upon himself, the same are all Men ever since under too. The same Liberty also, that *Adam* had of affixing any new name to any *Idea*; the same has any one still, (especially the beginners of Languages, if we can imagine any such,) but only with this difference, that in Places, where Men in Society have already established a Language amongst them, the signification of Words are very warily and sparingly to be alter'd: because Men being furnished already with names for their *Ideas*, and common Use having appropriated known names to certain *Ideas*, an affected misapplication of them cannot but be very ridiculous. He that hath new Notions, will, perhaps, venture sometimes on the coining new Terms, to express them: Men think it a Boldness, and 'tis uncertain, whether common Use will ever make them pass for current. But in Communication with others, it is necessary, that we conform the *Ideas* we make the vulgar Words of any Language stand for, to their known proper Significations, (which I have explain'd at large already,) or else to make known that new Signification, we apply them to.

C H A P. VII.

Of Particles.

§. 1. **B**ESIDES Words, which are names of *Ideas* in the Mind, there are a great many others that are made use of, to signify the connexion that the Mind gives to *Ideas*, or *Propositions*, one with another. The Mind, in communicating with others, does not only need signs of the *Ideas* it has then before it, but others also, to shew or intimate some particular action of its own, at that time, relating to those *Ideas*. This it does several ways; as, *Is*, and *Is not*, are the general marks of the Mind, affirming or denying. But besides affirmation, or negation, without which, there is in Words no Truth or Falshood, the Mind does, in declaring its Sentiments to others, connect, not only the parts of Propositions, but whole Sentences one to another, with their several Relations and Dependencies, to make a coherent Discourse.

§. 2. The Words, whereby it signifies what connexion it gives to the several Affirmations and Negations, that it unites in one continued Reasoning or Narration, are generally call'd *Particles*: and 'tis in the right use of these, that more particularly consists the clearness and beauty of a good Stile. To think well, it is not enough, that a Man has *Ideas* clear and distinct in his Thoughts, nor that he observes the agreement, or disagreement of some of them; but he must think in train, and observe the dependency of his Thoughts and Reasonings, one upon another: And to express well such methodical and rational Thoughts, he must have words to shew what *Connexion*, *Restriction*, *Distinction*, *Opposition*, *Emphasis*, &c. he gives to each respective part of his Discourse. To mistake in any of these, is to puzzle, instead of informing his Hearer: and therefore it is, that those words, which are not truly, by themselves, the names of any *Ideas*, are of such constant and indispensable use in Language, and do so much contribute to Mens well expressing themselves.

§. 3. This part of Grammar has been, perhaps, as much neglected, as some others over-diligently cultivated. 'Tis easie for Men to write, one after another, of *Cases* and *Genders*, *Moods* and *Tenses*, *Gerunds* and *Supines*: In these and the like, there has been great diligence used: and Particles themselves, in some Languages, have been, with great shew of exactness, ranked into their several orders. But though *Prepositions* and *Conjunctions*, &c. are names well known in Grammar, and the Particles contained under them, carefully ranked into their distinct subdivisions; yet he who would shew the right use of Particles, and what signification and force they have, must take a little more pains, enter into his own Thoughts, and observe nicely the several Postures of his Mind in discoursing.

§. 4. Neither is it enough, for the explaining of these Words, to render them, as is usually in Dictionaries, by Words of another Tongue which came nearest to their signification: For what is meant by them, is commonly as hard to be understood in one, as another Language. They are all marks of some Action, or Intimation of the Mind; and therefore to understand them rightly, the several views, postures, stands, turns, limitations, and exceptions, and several other Thoughts of the Mind, for which we have either none, or very deficient Names, are diligently to be studied. Of these, there are a great variety, much exceeding the number of Particles, that most Languages have to express them by: and therefore it is

not

not to be wondred, that most of these Particles have divers, and sometimes almost opposite significations. In the Hebrew Tongue, there is a Particle consisting but of one single Letter, of which there are reckoned up, as I remember, seventy, I am sure above fifty several significations.

§. 5. *BUT* is a Particle, none more familiar in our Language: and he that says it is a discreitive Conjunction, and that it answers *Sed* in Latin, or *Mais* in French, thinks he has sufficiently explained it. But yet it seems to me to intimate several relations, the Mind gives to the several Propositions or Parts of them, which it joins by this monosyllable,

First, *BUT* to say no more: Here it intimates a stop of the Mind, in the course it was going, before it came to the end of it.

Secondly, *I saw BUT two Planets*: Here it shews, that the Mind limits the sense to what is expressed, with a negation of all other.

Thirdly, *You pray; BUT it is not that GOD would bring you to the true Religion*,

Fourthly, *BUT that he would confirm you in your own*: The first of these *BUTS*, intimates a supposition, in the Mind, of something otherwise than it should be; the latter shews, that the Mind makes a direct opposition between that, and what goes before it.

Fifthly, *All Animals have sense; BUT a Dog is an Animal*: Here it signifies little more, but that the latter Proposition is joined to the former, as the *Minor* of a Syllogism.

§. 6. To these, I doubt not, might be added a great many other significations of this Particle, if it were my business to examine it in its full latitude, and consider it in all the places it is to be found: which if one should do, I doubt, whether in all those manners it is made use of, it would deserve the title of *Discreitive*, which Grammarians give to it. But I intend not here a full explication of this sort of Signs; the instances I have given in this one, may give occasion to reflect upon their use and force in Language, and lead us into the contemplation of several Actions of our Minds in discoursing, which it has found a way to intimate to others by these Particles, some whereof constantly, and others in certain constructions, have the sense of a whole Sentence contain'd in them.

CHAP. VIII.

Of abstract and concrete Terms.

§. 1. **T**He ordinary Words of Language, and our common use of them, would have given us light into the nature of our *Ideas*, if they had been but considered with attention. The Mind, as has been shewn, has a power to abstract its *Ideas*, and so they become Essences, general Essences, whereby the Sorts of Things are distinguished: Now each abstract *Idea* being distinct, so that the one can never be the other, the Mind will, by its intuitive Knowledge, perceive their difference; and therefore in Propositions, no two whole *Ideas* can ever be affirmed one of another. This we see in the common use of Language, which permits not any two abstract Words, or Names of abstract *Ideas*, to be affirmed one of another. For how near of kin soever they may seem to be, and how certain soever it is, that Man is an Animal, or rational, or white, yet

yet every one, at first hearing, perceives the falshood of these Propositions; *Humanity is Animality, or Rationality, or Whiteness*: And this is as evident, as any of the most allow'd Maxims. All our Affirmations then are only in concrete, which is the affirming, not one abstract *Idea* to be another, but one abstract *Idea* be join'd to another; which abstract *Ideas*, in Substances, may be of any sort; in all the rest, are little else but of Relations; and in Substances, the most frequent are of Powers; *v.g. a Man is white*, signifies, that the thing that has the Essence of a Man, has also in it the Essence of Whiteness, which is nothing but a power to produce the *Idea* of Whiteness in one, whose Eyes can discover ordinary Objects; or a Man is rational, signifies, that the same thing that hath the Essence of a Man, hath also in it the Essence of Rationality, *i. e.* a power of Reasoning.

§. 2. This distinction of Names, shews us also the difference of our *Ideas*: For if we observe them, we shall find, that our *simple Ideas have all abstract, as well as concrete Names*: The one whereof is (to speak the Language of Grammarians) a Substantive, the other an Adjective; as Whiteness, White; Sweetness, Sweet. The like also holds in our *Ideas of Modes and Relations*; as Justice, Just; Equality, Equal; only with this difference, That some of the concrete Names of Relations, amongst Men chiefly, are Substantives; as *Paternitas, Pater*; whereof it were easie to render a Reason. But as to our *Ideas of Substances*, we have very few or no abstract Names at all. For though the Schools have introduced *Animalitas, Humanitas, Corporietas*, and some others; yet they hold no proportion with that infinite number of Names of Substances, to which they never were ridiculous enough to attempt the coining of abstract ones: and those few that the Schools forged, and put into the mouths of their Scholars, could never yet get admittance into common use, or obtain the license of publick approbation. Which seems to me at least to intimate the confession of all Mankind, that they have no *Ideas* of the real Essences of Substances, since they have not Names for such *Ideas*: which no doubt they would have had, had not their consciousness to themselves of their ignorance of them, kept them from so idle an attempt. And therefore though they had *Ideas* enough to distinguish Gold from a Stone, and Metal from Wood; yet they but timerously ventured on such terms, as *Aurietas* and *Saxietas, Metallietas* and *Lignietas*, or the like names, which should pretend to signify the real Essences of those Substances, whereof they knew they had no *Idea*. And indeed, it was only the Doctrine of substantial Forms, and the confidence of shameless Pretenders to a knowledge that they had not, which first coined, and then introduced *Animalitas*, and *Humanitas*, and the like; which yet went very little farther than their own Schools, and could never get to be current amongst understanding Men. Indeed, *Humanitas* was a Word, familiar amongst the *Romans*; but in a far different sense, and stood not for the abstract Essence of any Substance; but was the abstract Name of a Mode, and its concrete *Humanus*, not *Homo*.

C H A P. IX.

Of the Imperfection of Words.

§. 1. **F**rom what has been said in the foregoing Chapters, it is easie to perceive, what imperfection there is in Language, and how the very nature of Words, makes it almost unavoidable, for many of them to be doubtful and uncertain in their significations. To examine the perfection, or imperfection of Words, it is necessary, first, to consider their use and end: For as they are more or less fitted to attain that, so are they more or less perfect. We have, in the former part of this Discourse, often, upon occasion, mentioned a *double use of Words* :

First, One for the recording of our own Thoughts.

Secondly, The other for the communicating of our Thoughts to others.

§. 2. As to the first of these, *for the recording our own Thoughts*, for the help of our own Memories, whereby, as it were, we talk to our selves any Words will serve the turn. For since Sounds are voluntary and indifferent signs of any *Ideas*, a Man may use what Words he please, to signify his own *Ideas* to himself: and there will be no imperfection in them, if he constantly use the same sign for the same *Idea*: for then he cannot fail of having his meaning understood, wherein consists the right use and perfection of Language.

§. 3. *Secondly*, As to *communication by Words*, that too has a double use:

I. *Civil*.

II. *Philosophical*.

First, By their *civil Use*, I mean such a communication of Thoughts and *Ideas* by Words, as may serve for the upholding common Conversation and Commerce, about the ordinary Affairs and Conveniencies of civil Life in the Societies of Men, one amongst another.

Secondly, By the *philosophical Use* of Words, I mean such an use of them, as may serve to convey the precise Notions of Things, and to express, in general Propositions, certain and undoubted Truths, which the Mind may rest upon, and be satisfied with, in its search after true Knowledge. These two Uses are very distinct; and a great deal less exactness will serve in the one, than in the other, as we shall see in what follows.

§. 4. The chief End of Language in Communication, being to be understood, Words serve not well for that end, neither in civil, nor philosophical Discourse, when any Word does not excite in the Hearer, the same *Idea* which it stands for in the Mind of the Speaker. Now since Sounds have no natural connexion with our *Ideas*, but have all their signification from the arbitrary imposition of Men, the *doubtfulness* and uncertainty of their signification, which is the imperfection we here are speaking of, has its cause more in the *Ideas* they stand for, than in any incapacity there is in one Sound, more than in another, to signify any *Idea*: For in that regard, they are all equally perfect.

That then which makes doubtfulness and uncertainty in the signification of some Words more than others, is the difference of *Ideas* they stand for.

§. 5. Words having naturally no signification, the *Ideas* which each stands for, must be learned and retained, by those who would exchange Thoughts, and hold intelligible Discourse with others, in any Language. But this is hardest to be done, where,

First, The *Ideas* they stand for, are very complex, and made up of a great number of *Ideas* put together.

Secondly, Where the *Ideas* they stand for, have no certain connexion in Nature; and so no settled Standard, any where in Nature existing, to rectify and adjust them by.

Thirdly, Where the signification of the Word is referred to a Standard, which Standard is not easie to be known.

Fourthly, Where the signification of the Word, and the real Essence of the Thing, are not exactly the same. These are difficulties that attend the signification of several Words that are intelligible. Those which are not intelligible at all, such as Names standing for any simple *Ideas*, which another has not Organs or Faculties to attain; as the Names of Colours to a blind Man, or Sounds to a deaf Man, need not here be mentioned.

In all these cases, we shall find an imperfection in Words; which I shall more at large explain, in their particular application to our several sorts of *Ideas*: For if we examine them, we shall find, that the *Names of mixed Modes*, are most liable to doubtfulness and imperfection, for the two first of these Reasons; and the *Names of Substances* chiefly, for the two latter.

§. 6. *First*, The *Names of mixed Modes*, are many of them liable to great uncertainty and obscurity in their signification.

I. *Because of that great Composition*, these complex *Ideas* are often made up of. To make Words serviceable to the end of Communication, is necessary, (as has been said) that they excite, in the Hearer, exactly the same *Idea* they stand for, in the Mind of the Speaker: Without this, Men fill one another's Heads with noise and sounds; but convey not thereby their Thoughts, and lay not before one another their *Ideas*, which is the end of Discourse and Language. But when a word stands for a very complex *Idea*, that is compounded and decompounded, it is not easie for Men to form and retain that *Idea* so exactly, as to make the Name in common use, stand for the same precise *Idea*, without any the least variation. Hence it comes to pass, that Mens Names, of very compound *Ideas*, such as for the most part are moral Words, have seldom, in two different Men, the same precise signification; since one Man's complex *Idea* seldom agrees with another's; and often differs from his own, from that which he had yesterday, or will have to morrow.

§. 7. II. *Because the Names of mixed Modes*, for the most part, want Standards in Nature, whereby Men may rectify and adjust their significations; therefore they are very various and doubtful. They are assemblages of *Ideas* put together at the pleasure of the Mind, pursuing its own ends of Discourse, and suited to its own Notions; whereby it designs not to copy any thing really existing, but to denominate and rank Things, as they come to agree, with those Archetypes or Forms it has made. He that first brought the word *Sham*, *Wheedle*, or *Banter* in use, put together, as he thought fit, those *Ideas* he made it stand for: And as it is with any new Names of Modes, that are now brought into any Language; so was it with the old ones, when they were first made use of. Names therefore, that stand for Collections of *Ideas*, which the Mind makes at pleasure, must needs be of doubtful signification, when such Collections are no-where to be found constantly united

united in Nature, nor no Patterns to be shewn whereby Men may adjust them, what the word *Murther*, or *Sacrilege*, &c. signifie, can never be known from Things themselves. There be many of the parts of those complex *Ideas*, which are not visible in the Action it self, the Intention of the Mind, or the Relation of holy Things, which make a part of *Murther*, or *Sacrilege*, have no necessary connexion with the outward and visible Action of him that commits either: and the pulling the Trigger of the Gun, with which the Murther is committed, and is all the Action, that, perhaps, is visible, has no natural connexion with those other *Ideas*, that make up the complex one, named *Murther*. They have their union and combination only from the Understanding, which unites them under one Name: but uniting them without any Rule, or Pattern, it cannot be but that the signification of the Name, that stands for such voluntary Collections, should be often various in the Minds of different Men, who have scarce any standing Rule to regulate themselves, and their Notions of such arbitrary *Ideas* by.

§. 8. 'Tis true, *common Use*, that is the Rule of Propriety, may be supposed here to afford some aid, to settle the signification of Language; and it cannot be denied, but that in some measure it does. Common use regulates the Meaning of Words pretty well for common Conversation; but no body having an Authority to establish the precise signification of Words, nor determine to what *Ideas* any one shall annex them, common Use is not sufficient to adjust them to philosophical Discourses; there being scarce any Name, of any very complex *Idea*, (to say nothing of others,) which, in common Use, has not a great latitude, and which keeping within the bounds of Propriety, may not be made the sign of far different *Ideas*. Besides, the rule and measure of Propriety it self being nowhere established, it is often matter of dispute, whether this or that way of using a Word, be propriety of Speech, or no. From all which, it is evident, that the Names of such kind of very complex *Ideas*, are naturally liable to this imperfection, to be of doubtful and uncertain signification; and even in Men, that have a Mind to understand one another, do not always stand for the same *Idea* in Speaker and Hearer. Though the names *Glory* and *Gratitude* be the same in every Man's mouth, through a whole Country, yet the complex collective *Idea*, which every one thinks on, or intends by that Name, is apparently very different by Men using the same Language.

§. 9. The way also wherein the Names of mixed Modes are ordinarily learned, does not a little contribute to the doubtfulness of their signification. For if we will observe how Children learn Languages, we shall find, that to make them understand what the Names, of simple *Ideas*, or Substances, stand for, People ordinarily shew them the thing, whereof they would have them have the *Idea*; and then repeat to them the Name that stands for it, as *White*, *Sweet*, *Milk*, *Sugar*, *Cat*, *Dog*. But as for mixed Modes, especially the most material of them moral Words, the Sounds are usually learn'd first, and then to know what complex *Ideas* they stand for, they are either beholden to the explication of others, or (which happens for the most part) are left to their own Observation and Industry; which being little laid out in the search of the true and precise meaning of Names, these moral Words are, in most Mens mouths, little more than bare Sounds; or when they have any, 'tis for the most part but a very obscure and confused signification. And even those themselves, who have with more attention settled their Notions, do yet hardly avoid the inconvenience, to have them stand for complex *Ideas*, different from

those which other, even intelligent and studious Men, make them the signs of. Where shall one find any, either *controversial Debate*, or *familiar Discourse*, concerning Honour, Faith, Grace, Religion, Church, &c. wherein it is not easie to observe the different Notions Men have of them; which is nothing but this, that they are not agreed in the signification of those Words, have not the same complex *Ideas* they make them stand for: And so all the contests that follow thereupon, are only about the meaning of a Sound. And hence we see, that in the interpretation of Laws, whether Divine, or Humane, there is no end; Comments beget Comments, and Explications make new matter for Explications: And of limitting, distinguishing, varying the signification of these moral Words, there is no end. These *Ideas* of Mens making, are, by Men still having the same Power, multiplied in *infinitum*. Many a Man, who was pretty well satisfied of the meaning of a Text of Scripture, or Clause in the Code, at first reading, has, by consulting Commentators, quite lost the sense of it, and, by those Elucidations, given rise or increase to his Doubts, and drawn obscurity upon the place. I say not this, that I think Commentaries needless; but to shew how uncertain the Names of mixed Modes naturally are, even in the mouths of these, who had both the Intention and the Faculty of Speaking, as clearly as Language, was capable to express their Thoughts.

§. 10. What *obscurity* this has unavoidably brought upon the Writings of Men, who have lived in remote Ages, and different Countries, it will be needless to take notice. Since the numerous Volumes of learned Men, employing their Thoughts that way, are proofs more than enough, to shew what Attention, Study, Sagacity, and Reasoning is required, to find out the true Meaning of ancient Authors. But there being no Writings we have any great concernment to be very solicitous about the meaning of, but those that contain either Truths we are required to believe, or Laws we are to obey, and draw Inconveniencies on us, when we mistake or transgress, we may be less anxious about the sense of other Authors; who Writing but their own Opinions, we are under no greater necessity to know them, than they to know ours. Our good or evil depending not on their Decrees, we may safely be ignorant of their Notions: And therefore in the reading of them, if they do not use their Words with a due clearness and perspicuity, we may lay them aside, and without any injury done them, resolve thus with our selves,

Si non vis intelligi, debes negligi.

§. 11. If the signification of the Names of mixed Modes are uncertain, because there be no real Standards existing in Nature, to which those *Ideas* are referred, and by which they may be adjusted, the Names of Substances are of a doubtful signification, for a contrary reason, viz. because the *Ideas* they stand for, are supposed conformable to the reality of Things, and are referred to Standards made by Nature. In our *Ideas* of Substances, we have not the liberty as in mixed Modes, to frame what Combinations we think fit, to be the characteristical Notes, to rank and denominate Things by. In these we must follow Nature, suit our complex *Ideas* to real Existences, and regulate the signification of their Names, by the Things themselves, if we will have our Names to be the signs of them, and stand for them. Here, 'tis true, we have Patterns to follow; but Patterns, that will make the signification of their Names very uncertain: For Names must be of a very unsteady and various meaning, if the *Ideas* they stand for, be referred to Standards without us, that either can-

not

not be known at all, or can be known but imperfectly and uncertainly.

§. 12. The Names of Substances have, as has been shewed, a double reference in their ordinary use.

First, Sometimes they are made to stand for, and so their signification is supposed to agree to, the real constitution of Things, from which all their Properties flow, and in which they all centre. But this real Constitution, or (as it is apt to be called) Essence, being utterly unknown to us, any Sound that is put to stand for it, must be very uncertain in its application; and it will be impossible to know what Things are, or ought to be called an Horse, or Antimony, when those Words are put for real Essences, that we have no Idea of at all. And therefore in this supposition, the Names of Substances being referred to Standards that cannot be known, their Significations can never be adjusted and established by those Standards.

§. 13. Secondly, The simple Ideas that are found to co-exist in Substances, being that which their Names immediately signify, these, as united in the several Sorts of Things, are the proper Standards to which their Names are referred, and by which their Significations may best be rectified. But neither will these Archetypes so well serve to this purpose, as to leave these Names without very various and uncertain significations; because these simple Ideas that co-exist, and are united in the same Subject, being very numerous, and having all an equal right to go into the complex specifick Idea, which the specifick Name is to stand for, Men, though they purpose to themselves the very same Subject to consider, yet frame very different Ideas about it; and so the Name they use for it, unavoidably comes to have, in several Men, very different significations. The simple Qualities, which make up the complex Ideas, being most of them Powers, in relation to Changes they are apt to make in, or receive from other Bodies, are almost infinite. He that shall but observe, what a great variety of alterations any one of the baser Metals is apt to receive, from the different application only of Fire; and how much a greater number of Changes any of them will receive in the hands of a Chymist, by the application of other Bodies, will not think it strange, that I count the Properties of any sort of Bodies not easie to be collected, and completely known by the ways of enquiry, which our Faculties are capable of. They being therefore at least so many, that no Man can know the precise and definite number, they are differently discovered by different Men, according to their various skill, attention, and ways of handling; who therefore cannot chuse but have different Ideas of the same Substance, and therefore make the signification of its common Name very various and uncertain. For the complex Ideas of Substances, being made up of such simple ones as are supposed to co-exist in Nature, every one has a right to put into his complex Idea, those Qualities he has found to be united together. For though in the Substance Gold, one satisfies himself with Colour and Weight, yet another thinks Solubility in *Aq. Regia*, as necessary to be join'd with that Colour in his Idea of Gold, as any one does its Fusibility; Solubility in *aq. regia*, being a Quality as constantly join'd with its Colour and Weight, as Fusibility, or any other; others put in its Ductility or Fixedness, &c. as they have been taught by Tradition, or Experience. Who of all these, has established the right signification of the word *Gold*? Or who shall be the Judge to determine? Each has his Standard in Nature, which he appeals to, and with Reason thinks he has the same right to put into his complex Idea, signified by the word *Gold*, those Qualities, which upon trial he has

found united; as another, who has not so well examined, has to leave them out; or a third, who has made other Trials, has to put in others. For the Union in Nature of these Qualities, being the true Ground of their Union, in one complex *Idea*, Who can say one of them has more Reason to be put in, or left out than another? From whence it will always unavoidably follow, that the complex *Ideas* of Substances, in Men using the same Name for them, will be very various; and so the significations of those names, very uncertain.

§ 14. Besides, there is scarce any particular thing existing, which in some of its simple *Ideas*, does not communicate with a greater, and in others with a less number of particular Beings: Who shall determine in this Case, which are those that are to make up the precise Collection, which is to be signified by the specific Name; or can with any just Authority prescribe which obvious or common Qualities are to be left out; Or which more secret, or more particular, are to be put into the signification of the name of any Substance? All which together, seldom or never fail to produce that various and doubtful Signification in the names of Substances, which causes such Uncertainty, Disputes, or Mistakes, when we come to a Philosophical Use of them.

§ 15. 'Tis true, as to civil and common Conversation, the general names of Substances, regulated in their ordinary Signification by some obvious Qualities, (as by the Shape and Figure in Things of known seminal Propagation, and in other Substances, for the most part by Colour, join'd with some other sensible Qualities,) do well enough, to design the Things they would be understood to speak of. And so Men usually conceive well enough the Substances meant by the Word Gold, or Apple, to distinguish the one from the other. But in Philosophical Enquiries and Debates, where general Truths are to be established, and Consequences drawn from Positions laid down, there the precise signification of the names of Substances will be found, not only not to be well established, but also very hard to be so. For Example, he that shall make Malleability, or a certain degree of Fixedness, a part of his complex *Idea* of Gold, may make Propositions concerning Gold, and draw Consequences from them, that will truly and clearly follow from Gold, taken in such a signification: But yet such as another Man can never be forced to admit, nor be convinced of their Truth, who makes not Malleableness, or the same degree of Fixedness, part of that complex *Idea*, that the name Gold, in his use of it, stands for.

§ 16. This is a natural, and almost unavoidable Imperfection in almost all the names of Substances, in all Languages whatsoever, which Men will easily find, when once passing from confused or loose Notions, they come to more strict and close Enquiries. For then they will be convinced, how doubtful and obscure those Words are in their Signification, which in ordinary use appeared very clear and determined. I was once in a Meeting of very learned and ingenious Physicians, where by chance there arose a Question, whether any *Liquor* passed through the Filaments of the Nerves; the Debate having been managed a good while, by variety of Arguments on both sides, I (who had been used to suspect, that the greatest part of Disputes were more about the signification of Words, than a real difference in the Conception of Things) desired, That before they went any farther on in this Dispute, they would first examine, and establish amongst them, what the Word *Liquor* signified. They at first were a little surprized at the Proposal; and had they been Persons less ingenious, they might, perhaps, have taken it for a very frivolous, or extravagant one:

one : Since there was no one there, that thought not himself to understand very perfectly, what the Word *Liquor* stood for ; which, I think too, none of the most perplexed names of Substances. However, they were pleased to comply with my Motion, and upon Examination found, that the signification of that Word, was not so settled and certain, as they had all imagined ; but that each of them made it a sign of a different complex *Idea*. This made them perceive, that the Main of their Dispute was about the signification of that Term ; and that they differed very little in their Opinions, concerning some fluid and subtile Matter, passing through the Conduits of the Nerves ; though it was not so easie to agree, whether it was to be called *Liquor*, or no ; a thing which when each considered, he thought it not worth the contending about.

§. 17. How much this is the Case of the greatest part of Disputes, that Men are engaged so hotly in, I shall, perhaps, have an occasion in another place to take notice. Let us only here consider a little more exactly the fore-mentioned instance of the Word *Gold*, and we shall see how hard it is precisely to determine its Signification. Almost all agree, that it should signify a Body of a certain yellow shining Colour ; which being the *Idea* to which Children have annexed that name, the shining yellow part of a Peacock's Tail, is properly to them Gold. Others finding Fusibility join'd with that yellow Colour in Gold, think the other which contain'd nothing but the *Idea* of Body with that Colour not truly to represent Gold, but to be an imperfect *Idea* of that sort of Substance : And therefore the Word Gold, as referr'd to that sort of Substances, does of right signify a Body of that yellow Colour, which by the Fire will be reduced to Fusion, and not to Ashes. Another by the same Reason adds, the Weight, which being a Quality, as straitly join'd with that Colour, as its Fusibility, he thinks has the same Reason to be join'd in its *Idea*, and to be signified by its name : And therefore the other made up of Body, of such a Colour and Fusibility, to be imperfect ; and so on of all the rest : Wherein no one can shew a Reason, why some of the inseparable Qualities, that are always united in Nature, should be put into the nominal Essence, and others left out : Or why the Word Gold, signifying that sort of Body the Ring on his Finger is made of, should determine that sort, rather by its Colour, Weight, and Fusibility ; than by its Colour, Weight, and Solubility in *aq. regia* : Since the dissolving it by that Liquor, is as inseparable from it, as the Fusion by Fire ; and they are both of them nothing, but the relation that Substance has to two other Bodies, which have a Power to operate differently upon it. For by what Right is it, that Fusibility comes to be a part of the Essence, signified by the Word Gold, and Solubility but a property of it ? Or why is its Colour part of the Essence, and its Malleableness but a property ? That which I mean, is this, That these being all but Properties, depending on its real Constitution ; and nothing but Powers, either active or passive, in reference to other Bodies, no one has Authority to determine the signification of the Word Gold, (as referr'd to such a Body existing in Nature,) more to one Collection of *Ideas* to be found in that Body, than to another : Whereby the signification of that name must unavoidably be very uncertain. Since, as has been said, several People observe Properties in the same Substance ; and, I think, I may say no Body all. And therefore we have but very imperfect descriptions of Things, and Words have very uncertain Significations.

§. 18. By what has been before said, it is easie to observe, that the Names of simple Ideas are, of all others the least liable to Mistakes. First, Because the *Ideas* they stand for, are much easier got, and more clearly

clearly retain'd, than those of more complex ones, and therefore they are not liable to the uncertainty or inconvenience of those very compounded mixed Modes; and *Secondly*, because they are never referr'd to any other Essence, but barely that Perception they immediately signify: Which reference is, that which renders the signification of the names of Substances naturally so perplexed, and gives occasion to so many Disputes. Men that do not perversly use their Words, or on purpose set themselves to cavil, seldom mistake in any Language, they are acquainted with, the Use and Signification of the names of simple *Ideas*, White and Sweet, Yellow and Bitter, carry a very obvious meaning with them, which every one precisely comprehends, or easily perceives he is ignorant of, and seeks to be informed. But what precise Collection of simple *Ideas*, *Modesty* or *Frugality* stand for in another's use, is not so certainly known: And however we are apt to think, we well enough know, what is meant by *Gold* or *Iron*; yet the precise complex *Idea*, others make them the signs of, is not so certain: And I believe it is very seldom, that in Speaker and Hearer, they stand for exactly the same Collection: Which must needs produce Mistakes and Disputes, when they are made use of in Discourses, wherein Men have to do with universal Propositions, and would settle in their Minds universal Truths, and consider the Consequences that follow from them.

§. 19. By the same Rule, the names of simple Modes are next to simple *Ideas*, those that are least liable to Doubt or Uncertainty, especially those of Figure and Number, of which Men have so clear and distinct *Ideas*, and amongst them, those that are least compounded, and least removed from simple ones. Who ever, that had a Mind to understand them, mistook the ordinary meaning of *Seven*, or a *Triangle*?

§. 20. Mixed Modes also, that are made up but of a few and obvious simple *Ideas*, have usually names of no very doubtful Signification. But the names of mixed Modes, which comprehend a great number of simple *Ideas*, are commonly of a very doubtful, and undetermined Signification, as has been shewed. The names of Substances being annexed to *Ideas*, that are neither the real Essences, nor exact Representations of the patterns they are referred to, are liable yet to greater Imperfection and Uncertainty, especially when we come to a philosophical use of them.

§. 21. The great disorder that happens in our names of Substances, proceeding for the most part from our want of Knowledge, and Inability to penetrate into their real Constitutions, it may probably be wondered, *Why I charge this as an Imperfection, rather upon our Words than Understandings.* This Exception, has so much appearance of Justice, that I think my self obliged, to give a Reason why I have followed this Method. I must confess then, that when I first began this Discourse of the Understanding, and a good while after, I had not the least Thought, that any Consideration of Words was at all necessary to it. But when having passed over the Original and Composition of our *Ideas*, I began to examine the Extent and Certainty of our Knowledge, I found it had so near a connexion with Words, that unless their force and manner of Signification were first well observed, there could be very little said clearly and pertinently concerning Knowledge: which being conversant about Truth, had constantly to do with Propositions: and though it terminated in Things, yet it was for the most part so much by the intervention of Words, that they seem'd scarce separable from our general Knowledge. At least they interpose themselves so much between our Understandings, and the Truth, it would contemplate and apprehend, that like the *Medium* through

through which visible Objects pass, their Obscurity and Disorder does not seldom cast a mist before our Eyes, and impose upon our Understandings. If we consider, in the Fallacies Men put upon themselves as well as others, and the Mistakes in Mens Disputes and Notions, how great a part is owing to Words, and their uncertain or mistaken Significations, we shall have reason to think this no small obstacle in the way to Knowledge; which, I conclude we are the more careful to be warned of, because it has been so far from being taken notice of as an Inconvenience, that the Arts of improving it, have been made the business of Mens study; and attained the Reputation of Learning and Subtilty, as we shall see in the following Chapter. But I am apt to imagine, that were the imperfections of Language, as the Instrument of Knowledge, more thoroughly weighed, a great many of the Controversies, that make such a noise in the World, would of themselves cease; and the way to Knowledge, and, perhaps, Peace too, lie a great deal opener than it does.

§. 22. Sure I am, that the signification of Words, in all Languages, depending very much on the Thoughts, Notions, and *Ideas* of him that uses them, must unavoidably be of great uncertainty, to Men of the same Language and Country. This is so evident in the Greek Authors, that he that shall peruse their Writings, will find, in almost every one of them, a distinct Language, though the same Words. But when to this natural difficulty in every Country, there shall be added different Countries, and remote Ages, wherein the Speakers and Writers had very different Notions, Tempers, Customs, Ornaments, and Figures of Speech, &c. every one of which, influenced the signification of their Words then, though to us now, they are lost and unknown, *it would become us to be charitable one to another in our Interpretations or Misunderstandings of those ancient Writings*, which though of great concernment to us to be understood, are liable to the unavoidable difficulties of Speech, which (if we except the Names of simple *Ideas*, and some very obvious Things) is not capable, without a constant defining the terms, of conveying the sense and intention of the Speaker, without any manner of doubt and uncertainty, to the Hearer. And in Discourses of Religion, Law, and Morality, as they are matters of the highest concernment, so there will be the greatest difficulty.

§. 23. The Volumes of Interpreters, and Commentators on the Old and New Testament, are but too manifest proofs of this. Though every thing said in the Text be infallibly true, yet the Reader may be, nay, cannot chuse but be very fallible in the understanding of it. Nor is it to be wondred, that the Will of G O D, when cloathed in Words, should be liable to that doubt and uncertainty, which unavoidably attends that sort of Conveyance, when even his Son, whilst cloathed in Flesh, was subject to all the Frailties and Inconveniencies of humane Nature, Sin excepted. And we ought to magnifie his Goodness, that he hath spread before all the World, such legible Characters of his Works and Providence, and given all Mankind so sufficient a light of Reason, that they to whom this written Word never came, could not (when-ever they set themselves to search) either doubt of the Being of a G O D, or of the Obedience due to Him. Since then the Precepts of Natural Religion are plain, and very intelligible to all Mankind, and seldom come to be controverted; and other revealed Truths, which are conveyed to us by Books and Languages, are liable to the common and natural obscurities and difficulties incident to Words, methinks it would become us to be more careful and dili-

diligent in observing the former, and less magisterial, positive, and impetuous, in imposing our own sense and interpretations of the latter.

CHAP. X.

Of the Abuse of Words.

§. 1. **B**ESIDES the imperfection that is naturally in Language, and the obscurity and confusion that is so hard to be avoided in the Use of Words, there are several *wilful Faults and Neglects*, which Men are guilty of, in the way of Communication, whereby they render these signs less clear and distinct in their signification, than naturally they need to be.

§. 2. *First*, In this kind, the first and most palpable abuse is, the using of Words, without clear and distinct *Ideas*; or, which is worse, signs without any thing signified. Of these there are two sorts:

I. One may observe, in all Languages, certain Words, that if they be examined, will be found, in their first Original, and their appropriated Use, not to stand for any clear and distinct *Ideas*. These, for the most part, the several *Sects* of Philosophy and Religion have introduced. For their Authors, or Promoters, either affecting something singular, and out of the way of common apprehensions, or to support some strange Opinions, or cover some Weakness of their Hypothesis, seldom fail to coin new Words, and such as, when they come to be examined, may justly be called *insignificant Terms*. For having either had no determinable Collection of *Ideas* annexed to them, when they were first invented; or at least such as, if well examined, will be found inconsistent, 'tis no wonder if afterwards, in the vulgar use of the same party, they remain empty Sounds, with little or no signification, amongst those who think it enough to have them often in their mouths, as the distinguishing Characters of their Church, or School, without much troubling their heads to examine, what are the precise *Ideas* they stand for. I shall not need here to heap up instances, every one's reading and conversation will sufficiently furnish him: Or if he wants to be better stored, the great Mint-Masters of these kind of Terms, I mean the Schoolmen and Metaphysicians, (under which, I think, the disputing natural and moral Philosophers of these latter Ages, may be comprehended,) have wherewithal abundantly to content him.

§. 3. II. Others there be, who extend this abuse yet farther, who take so little care to lay by Words, which in their primary notation have scarce any clear and distinct *Ideas* they are annexed to, that by an unpardonable negligence, they familiarly use Words, which the Propriety of Language has affixed to very important *Ideas*, they use them, I say, without any distinct meaning at all. *Wisdom, Glory, Grace, &c.* are Words frequent enough in every Man's mouth; but if a great many of those who use them, should be asked, What they mean by them? they would be at a stand, and not know what to answer: A plain proof, that though they have learned those Sounds, and have them ready at their Tongues ends, yet there are no clear and distinct *Ideas* laid up in their Minds, which are to be expressed to others by them.

§. 4. *Men*, having been *accustomed* from their Cradles to learn Words, which are easily got and retained, *before they knew*, or had framed the complex Ideas, to which they were annexed, or which were to be found in the things they were thought to stand for, they usually continue to do so all their Lives, and without taking the pains necessary to settle in their Minds clear and distinct Ideas, they use their Words for such unsteady and confused Notions as they have, contenting themselves with the same Words other People use; as if their very sound, necessarily carried with it constantly the same meaning. This though Men make a shift with, in their ordinary Occurrences of Life, where they find it necessary to be understood, and therefore they make signs till they are so: Yet this insignificance in their Words, when they come to Reason, concerning either their Tenents or Interest, manifestly fills their Discourse with abundance of empty unintelligible noise and jargon, especially in moral Matters, where the Words, for the most part, standing for arbitrary and numerous Collections of Ideas, not regularly and permanently united in Nature, their bare Sounds are often only thought on, or at least very obscure and uncertain Notions annexed to them. Men take the Words they find in use amongst their Neighbours; and that they may not seem ignorant what they stand for, use them confidently, without much troubling their heads about a certain fixed meaning: Whereby, besides the ease of it, they obtain this advantage, That as in such Discourses they seldom are in the right, so they are as seldom to be convinced, that they are in the wrong; it being all one to go about to draw those Men out of their Mistakes, who have no settled Notions, as to dispossess a Vagrant of his Habitation, who has no settled abode: This I guess to be so; and every one may observe in himself and others, whether it be, or no.

§. 5. *Secondly*, Another great abuse of Words is, *Inconstancy* in the use of them. It is hard to find a Discourse written of any Subject, especially of Controversie, wherein one shall not observe, if he read with attention, the same Words (and those commonly the most material in the Discourse, and upon which the Argument turns) used sometimes for one Collection of simple Ideas, and sometimes for another, which is a perfect abuse of Language. Words being intended for signs of my Ideas, to make them known to others, not by any natural signification, but by a voluntary imposition, 'tis plain cheat and abuse, when I make them stand sometimes for one thing, and sometimes for another; the wilful doing whereof, can be imputed to nothing but great folly, or greater dishonesty. And a Man, in his Accompts with another, may, with as much fairness, make the Characters of Numbers stand sometimes for one, and sometimes for another Collection of Unites: v. g. this Character 3, stands sometimes for three, sometimes for four, and sometimes for eight; as in his Discourse, or Reasoning, make the same Words stand for different Collections of simple Ideas. If Men should do so in their Reckonings, I wonder who would have to do with them? One who should speak thus, in the Affairs and Business in the World, and call 8 sometimes seven, sometimes nine, as best served his advantage, would presently have clapp'd upon him one of the two Names Men constantly are disgusted with; and yet in Arguings, and learned Contests, the same sort of proceeding passes commonly for Wit and Learning: But yet, to me, it appears a greater dishonesty, than the misplacing of Counters, in the casting up a Debt, and the cheat the greater, by how much Truth is of greater concernment and value, than Money.

§. 6. *Thirdly*, Another abuse of Language is; an *affected Obscurity*, by either applying old Words, to new and unusual Significations; or introducing new and ambiguous Terms, without defining either; or else putting them so together, as may confound their ordinary meaning. Though the Peripatetick Philosophy has been most eminent in this way, yet other Sects have not been wholly clear of it. There is scarce any of them, that are not cumbred with some Difficulties, (such is the imperfection of Humane Knowledge,) which they have been fain to cover with Obscurity of Terms, and to confound the Signification of Words, which, like a mist before Peoples Eyes, might hinder their weak parts from being discovered. That Body and Extension, in common use, stand for two distinct *Ideas*, is plain to any one that will but reflect a little: For were their Signification precisely the same, it would be as proper, and as intelligible to say, the Body of an Extension, as the Extension of a Body; and yet there are those who find it necessary to confound their Signification. To this abuse, and the mischiefs of confounding the Signification of Words, Logick, and the liberal Sciences, as they have been handled in the Schools, have given Reputation; and the admired Art of Disputing, hath added much to the natural imperfection of Languages, whilst it has been made use of, and fitted to perplex the signification of Words, more than to discover the Knowledge and Truth of Things: And he that will look into that sort of learned Writings, will find the Words there much more obscure, uncertain, and undetermined in their Meaning, than they are in ordinary Conversation.

§. 7. This is unavoidably to be so, where Mens Parts and Learning, are estimated by their Skill in *Disputing*. And if Reputation and Reward shall attend these Conquests, which depend mostly on the fineness and niceties of Words, 'tis no wonder if the Wit of Man so employ'd, should perplex, involve, and subtilize the signification of Sounds, so as never to want something to say, in opposing or defending any Question; the Victory being adjusted not to him who had Truth on his side, but the last word in the Dispute.

§. 8. This, though a very useless Skill, and that which I think the direct opposite to the ways of Knowledge, hath yet passed hitherto under the laudable and esteemed Names of *Subtility* and *Acuteness*, and has had the applause of the Schools, and encouragement of one part of the learned Men of the World; and no wonder, since the Philosophers of old, (the disputing and wrangling Philosophers I mean, such as *Lucian* wittily, and with Reason taxes,) and the Schoolmen since, aiming at Glory and Esteem, for their great and universal Knowledge, easier a great deal to be pretended to, than really acquired, found this a good Expedient to cover their Ignorance, with a curious and unexplicable Web of perplexed Words, and procure to themselves the admiration of others, by unintelligible terms, the apter to produce wonder, because they could not be understood: whilst it appears in all History, that these profound Doctors, were no wiser, nor more useful, than their Neighbours; and brought but small advantage to humane Life, or the Societies, wherein they lived: Unless the coining of new Words, where they produced no new Things to apply them to, or the perplexing or obscuring the signification of old ones, and so bringing all Things into question and dispute, were a thing profitable to the Life of Man, or worthy Commendation and Reward.

§. 9. For, notwithstanding these learned Disputants, these all knowing Doctors, it was to the unscholastick Statesman, that the Governments of the World owed their Peace, Defence, and Liberties; and from the illite-

rate

rate and contemned Mechanick, (a Name of Disgrace,) that they received the improvements of useful Arts. Nevertheless, this artificial Ignorance, and *learned Gibberish*, prevailed mightily in these last Ages, by the Interest and Artifice of those, who found no easier way to that pitch of Authority and Dominion they have attained, than by amusing the Men of Business, and Ignorant, with hard Words, or employing the Ingenious and Idle in intricate Disputes, about unintelligible Terms, and holding them perpetually entangled in that endless Labyrinth. Besides, there is no such way to gain admittance, or give defence to strange and absurd Doctrines, as to guard them round about with Legions of obscure, doubtful, and undefined Words. Which yet make these Retreats, more like the Dens of Robbers, or Holes of Foxes, than the Fortresses of fair Warriours: which if it be hard to get them out of, it is not for the strength that is in them, but the Briars and Thorns, and the Obscurity of the Thickets they are beset with. For Untruth being unacceptable to the Mind of Man, there is no other defence left for Absurdity, but Obscurity.

§. 10. Thus learned Ignorance, and this Art of keeping, even inquisitive Men, from true Knowledge, hath been propagated in the World; and hath much perplexed, whilst it pretended to inform the Understanding. For we see, that other well-meaning and wise Men, whose Education and Parts had not attained that accuteness, could intelligibly express themselves to one another; and in its plain use, make a benefit of Language. But though unlearned Men well enough understood the Words *White* and *Black*, &c. and had constant Notions of the *Ideas* signified by those Words; yet there were Philosophers found, who had learning and subtilty enough to prove, that *Snow* was *black*; (*i. e.* to prove, that *White* was *Black*;) whereby they had the advantage to destroy the Instruments and Means of Discourse, Conversation, Instruction, and Society; whilst with great Art and Subtilty, they did no more but perplex and confound the Signification of Words, and thereby render Language less useful, than the real Defects of it had made it, a Gift, which the illiterate had not attained to.

§. 11. These learned Men did equally instruct Mens Understandings, and profit their Lives, as he who should alter the signification of known Characters, and, by a subtle Device of Learning, far surpassing the Capacity of the Illiterate, Dull, and Vulgar, should, in his Writing, shew, that he could put *A.* for *B.* and *D.* for *E.* &c. to the no small admiration and benefit of his Reader; it being as senseless to put *Black*, which is a Word agreed on to stand for one sensible *Idea*, to put it, I say, for another, or the contrary *Idea*, *i. e.* to call *Snow Black*, as to put this mark *A.* which is a Character agreed on to stand for one modification of Sound, made by a certain motion of the Organs of Speech, for *B.* which is agreed on to stand for another modification of Sound, made by another certain motion of the Organs of Speech.

§. 12. Nor hath this mischief stopped in logical Niceties, or curious empty Speculations; it hath invaded the great Concernments of Humane Life and Society; obscured and perplexed the material Truths of Law and Divinity; brought Confusion, Disorder, and Uncertainty into the Affairs of Mankind; and if not destroyed, yet in great measure rendered useless, those two great Rules, Religion and Justice. What have the greatest part of the Comments and Disputes, upon the Laws of GOD and Man served for, but to make the meaning more doubtful, and perplex the sense? What have been the effect of those multiplied curious

Distinctions, and accute Niceties, but Obscurity and Uncertainty, leaving the Words more unintelligible, and the Reader more at a loss? How else comes it to pass, that Princes, speaking or writing to their Servants, in their ordinary Commands, are easily understood; speaking to their People, in their Laws, are not so? And, as I remarked before, doth it not often happen, that a Man of an ordinary Capacity, very well understands a Text, or a Law, that he reads, till he consults an Expositor, or goes to Council; who by that time he hath done explaining them, makes the Words signifie either nothing at all, or what he pleases.

§. 13. Whether any by Interests of these Professions have occasioned this, I will not here examine; but I leave it to be considered, whether it would not be well for Mankind, whose concernment it is to know Things as they are, and to do what they ought; and not to spend their Lives in talking about them, or tossing Words to and fro: Whether it would not be well, I say, that the Use of Words were made plain, and direct; and that Language, which was given us for the improvement of Knowledge, and bond of Society, should not be employ'd to darken Truth, and unsettle Peoples Rights; to raise Mists, and render unintelligible both Morality and Religion? Or that at least, if this will happen, it should not be thought Learning or Knowledge to do so?

§. 14. *Fourthly*, Another great abuse of Words is, the taking them for Things. This, though it, in some degree, concerns all Names in general; yet more particularly affects those of Substances: And to this Abuse, these Men are most subject, who confine their Thoughts to any one System, and give themselves up into a firm belief of the Perfection of any received Hypothesis; whereby they come to be persuaded, that the Terms of that Sect, are so suited to the Nature of Things, that they perfectly correspond with their real Existence. Who is there, that has been bred up in the Peripatetick Philosophy, who does not think the Ten Names, under which are ranked the Ten Predicaments, to be exactly conformable to the Nature of Things? Who is there, of that School, that is not persuaded, that *substantial forms, vegetative Souls, abhorrence of a Vacuum, intentional Species*, &c. are something real? These Words Men have learned from their very entrance upon Knowledge, and have found their Masters and Systems lay great stress upon them; and therefore they cannot quit the Opinion, that they are conformable to Nature, and are the Representations of something that really exists. The *Platonists* have their *Soul of the World*, and the *Epicureans* their *endeavour towards Motion*, in their Atoms, when at rest. There is scarce any Sect in Philosophy has not a distinct set of Terms, that others understand not. But yet this Gibberish, which in the weakness of Humane Understanding, serves so well to palliate Mens Ignorance, and cover their Errours, comes by familiar use amongst those of the same Tribe, to seem the most important part of Language, and of all others the Terms the most significant: And should *Aërial* and *Ætherial Vehicles* come once, by the prevalency of that Doctrine, to be generally received any where, no doubt those Terms would make impressions on Mens Minds, so as to establish them in the persuasion of the reality of such Things, as much as that peripatetick Forms have heretofore done.

§. 15. How much names taken for Things, are apt to mislead the Understanding, the attentive Reading of philosophical Writers would abundantly discover; and that, perhaps, in Words little suspected of any such misuse. I shall instance in one only, and that a very familiar one. How many intricate Disputes have there been about *Matter*, as if there were some

Some such thing really in Nature, distinct from *Body*, as 'tis evident, the Word *Matter* stands for an *Idea* distinct from the *Idea* of *Body*. For if the *Ideas* these two Terms stood for, were precisely the same, they might indifferently in all Places be put one for the other: but we see, that tho' it be proper to say, There is *one Matter of all Bodies*; one cannot say, There is *one Body of all Matters*. we familiarly say, one *Body* is bigger than another, but it sounds harsh (and I think is never used) to say, one *Matter* is bigger than another. Whence comes this then? *Viz.* from hence, that though *Matter* and *Body* be not really distinct; but where-ever there is one, there is the other: Yet *Matter* and *Body*, stand for two different Conceptions, whereof the one is incomplete, and but a part of the other. For *Body* stands for a solid extended figured Substance, whereof *Matter* is but a partial, and more confused Conception, it seeming to me to be used for the Substance and Solidity of *Body*, without taking in its Extension and Figure: And therefore it is that speaking of *Matter*, we speak of it always as one, because in Truth, it expressly contains nothing but the *Idea* of a solid Substance, which is every where the same, every where uniform: And therefore we no more conceive, or speak of different *Matters* in the World, than we do of different Solidities; though we both conceive, and speak of different *Bodies*, because Extension and Figure are capable of variation. But since Solidity cannot exist without Extension, and Figure, the taking *Matter* to be the name of something really existing under that Precision, has no doubt produced those obscure and unintelligible Discourses and Disputes, which have filled the Heads and Books of Philosophers concerning *Materia Prima*; which Imperfection or Abuse, how far it may concern a great many other general Terms, I leave to be considered. This, I think, I may at least say, that we should have a great many fewer Disputes in the World, if Words were taken for what they are, the signs of our *Ideas* only, and not for Things themselves. For when we argue about *Matter*, or any the like Term, we truly argue only about the *Idea* we express by that Sound, whether that precise *Idea* agree to any thing really existing in Nature, or no. And if Men would tell, what *Ideas* they make their Words stand for, there could not be half that Obscurity or Wrangling, in the search or support of Truth, that there is.

§. 16. But whatever inconvenience follows from this mistake of Words, this, I am sure, that by constant and familiar use, they charm Men into Notions far remote from the Truth of Things. 'Twould be a hard Matter, to persuade any one, that the Words which his Father or School-Master, the Parson of the Parish, or such a Reverend Doctor used, signified nothing that really existed in Nature: Which, perhaps, is none of the least Causes, that Men are so hardly drawn to quit their Mistakes; even in Opinions purely philosophical, and where they have no other Interest but Truth. For the Words, they have a long time been used to, remaining firm in their Minds, 'tis no wonder, that the wrong Notions annexed to them, should not be removed.

§. 17. Fifthly, Another Abuse of Words, is the setting them in the place of Things, which they do or can by no means signify. We may observe, that in the general names of Substances, whereof the nominal Essences are only known to us, when we put them into Propositions, and affirm or deny any thing about them, we do most commonly tacitly suppose, or intend, they should stand for the real Essence of a certain sort of Substances. For when a Man says Gold is malleable, he means, and would insinuate something more than this, that what I call Gold is malleable, (though truly

truly it amounts to no more,) but would have this understood, viz. that Gold; i. e. what has the real Essence of Gold is malleable, which amounts to thus much, that Malleableness depends on, and is inseparable from the real Essence of Gold. But a Man, not knowing wherein that real Essence consists, the connexion in his Mind of Malleableness, is not truly with an Essence he knows not, but only with the sound Gold he puts for it. Thus when we say, that *Animal rationale* is, and *Animal implume bibes latis unguibus* is not a good definition of a Man; 'tis plain, we suppose the Name *Man* in this case to stand for the real Essence of a Species, and would signify, that a *rational Animal* better described that real Essence, than a *two-leg'd Animal with broad Nails, and without Feathers*. For else, why might not *Plato* as properly make the Word, *ἄνθρωπος*, or *Man*, stand for his complex *Idea*, made up of the *Ideas* of a Body, distinguished from others, by a certain shape and other outward appearances, as *Aristotle*, make the complex *Idea*, to which he gave the Name *ἄνθρωπος*, or *Man*, of Body, and the Faculty of reasoning join'd together, unless the name *ἄνθρωπος*, or *Man*, were supposed to stand for something else, than what it signifies, and the *Idea* a Man professes he would express by it?

§. 18. 'Tis true, the names of Substances would be much more useful, and Propositions made in them much more certain, were the real Essences of Substances, the *Ideas* in our Minds, which those Words signified. And 'tis for want of those real Essences, that our Words convey so little Knowledge or Certainty in our Discourses about them: And therefore the Mind, to remove that Imperfection as much as it can, makes them, by a secret supposition, to stand for a thing, having that real Essence, as if thereby it made some nearer approaches to it. For though the Word *Man* or *Gold*, signify nothing truly but a complex *Idea* of Properties, united together in one sort of Substances: Yet there is scarce any Body in the use of these Words, but often supposes each of those names to stand for a thing having the real Essence, on which those Properties depend; which is so far from diminishing the Imperfection of our Words, that by a plain Abuse, it adds to it: when we would make them stand for something, which not being in our complex *Idea*, the name we use, can no ways be the sign of.

§. 19. This shews us the Reason, *Why in mixed Modes any of the Ideas that make the Composition of the complex one, being left out, or changed, it is allowed to be another thing, i. e. to be of another Species*, as is plain in Chance-medly, Man-slaughter, Murder, Parricide, &c. the Reason whereof is, because the complex *Idea* signified by that name, is the real, as well as nominal Essence; and there is no secret reference of that name to any other Essence, but that. But in Substances, it is not so. For though in that called Gold, one puts into his complex *Idea*, what another leaves out; and *Vice Versâ*: yet Men do not usually think, that therefore the Species is changed: Because they secretly in their Minds refer that name, and suppose it annexed to a real immutable Essence of a thing existing, on which those Properties depend. He that adds to his complex *Idea* of Gold, that of Fixedness, or Solubility in *aq. regia*, which he put not in it before, is not thought to have changed the Species; but only to have a more perfect *Idea*, by adding another, which is always in *rerum natura*, joined with those other, of which his former complex *Idea* consisted. But this reference of the name, to a thing whereof we have not the *Idea*, is so far from helping at all, that it only serves the more to involve us in Difficulties. For by this tacit reference to the real Essence of that Species of Bodies, the Word *Gold* (which by standing for

a more or less perfect Collection of simple *Ideas*, serves to design that sort of Body well enough in civil Discourse) comes to have no Signification at all, being put for somewhat whereof we have no *Idea* at all; and so can signifie nothing at all, when the Body it self is away. For however it may be thought all one; yet, if well considered, it will be found a quite different thing, to argue about Gold in name, and about a parcel of the Body it self, *v. g.* a piece of Leaf-Gold laid before us; though in Discourse, we are fain to substitute the name for the thing.

§. 20. That which, I think, very much disposes Men to substitute their names for the real Essences of Species, is the supposition before mentioned, that Nature works regularly in the Production of Things, and sets the Boundaries to each of those Species, by giving exactly the same real internal Constitution to each individual, which we rank under one general name. Whereas any one who observes their different Qualities, can hardly doubt that many of the Individuals, called by the same name, are in their internal Constitution, as different one from another, as several of those which are ranked under different specifick Names. *This supposition*, however that the same precise internal Constitution goes always with the same specifick name, makes Men forward to take those names for the Representatives of those real Essences, though indeed they signifie nothing but the complex *Ideas* they have in their Minds, when they use them. So that, if I may so say, signifying one thing, and being supposed for, or put in the place of another, they cannot but, in such a kind of use, cause a great deal of Uncertainty in Men's Discourses; especially in those who have thoroughly imbibed the Doctrine of substantial Forms, whereby they firmly imagine the several Species of Things to be determined and distinguished.

§. 21. But however preposterous and absurd it be, to make our names stand for *Ideas* we have not, or (which is all one) Essences that we know not, it being in effect, to make our Words the signs of nothing; yet 'tis evident to any one, whoever so little reflects on the use Men make of their Words, that there is nothing more familiar. When a Man asks, whether this or that thing he sees, let it be a Drill, or a monstrous *Fœtus*, be a *Man*, or no; 'tis evident, the Question is not, Whether that particular thing agree to his complex *Idea*, expressed by the name *Man*: But whether it has in it the real Essence of a Species of Things, which he supposes his name *Man* to stand for. *In which way of using the names of Substances, there are these false suppositions contained.*

First, That there are certain precise Essences, according to which Nature makes all particular Things, and by which they are distinguished into Species. That every thing has a real Constitution, whereby it is what it is, and on which its sensible Qualities depend, is past doubt: But I think it has been proved, that this makes not the distinction of Species, as we rank them; nor the boundaries of their names.

Secondly, This tacitly also insinuates, as if we had *Ideas* of these proposed Essences. For to what purpose else is it, to enquire whether this or that thing have the real Essence of the Species *Man*, if we did not suppose that there were such a specifick Essence known? Which yet is utterly false: And therefore such Application of names, as would make them stand for *Ideas* we have not, must needs cause great disorder in Discourses and Reasonings about them, and be a great inconvenience in our Communication by Words.

§. 22. *Sixthly*, There remains yet another more general, though, perhaps, less observed *Abuse of Words*; and that is, that Men having by a long and familiar use annexed to them certain *Ideas*, they are apt to *imagine so near and necessary a connexion between the names and the signification* they use in them, that they forwardly suppose one cannot but understand what their meaning is: and therefore one ought to acquiesce in the Words delivered, as if it were past doubt, that in the use of those commonly received sounds, the Speaker and Hearer had necessarily the same precise *Ideas*. Whence presuming, that when they have in Discourse used any Term, they have thereby, as it were, set before others the very thing they talk of. And so likewise taking the Words of others, as naturally standing for just what they themselves have been accustomed to apply them to, they never trouble themselves to explain their own, or understand clearly others meaning. From whence commonly proceeds Noise, and Wrangling, without Improvement or Information; whilst Men take Words to be the constant regular marks of agreed Notions, which in truth, are no more but the voluntary and unsteady signs of their own *Ideas*. And yet Men think it strange, if in Discourse, or (where it is often absolutely necessary) in Dispute, one sometimes asks the meaning of their Terms: Though the Arguings, one may every day observe in Conversation, make it evident, that there are few names of complex *Ideas*, which any two Men use for the same just precise Collection. 'Tis hard to name a Word, which will not be a clear instance of this. *Life* is a Term, none more familiar. Any one almost would take it for an Affront, to be asked what he meant by it. And yet if it comes in Question, whether a Plant, that lies ready formed in the Seed, have Life; whether the Embrio in an Egg before Incubation, or a Man in a Swound without Sense or Motion, be alive or no, it is easie to perceive, that a clear distinct settled *Idea* does not always accompany the Use of so known a Word, as that of *Life* is. Some gross and confused Conceptions Men indeed ordinarily have, to which they apply the common Words of their Language, and that serves them well enough in their ordinary Discourses and Affairs: but this is not sufficient for philosophical Enquiries. Knowledge and Reasoning require precise determinate *Ideas*. And though Men will not be so importunately dull, as not to understand what others say, without demanding an explication of their Terms; nor so troublesomely critical, as to correct others in the use of the Words they receive from them; yet where Truth and Knowledge are concerned in the Case, I know not what Fault it can be to desire the explication of Words, whose Sense seems dubious: Or why a Man should be ashamed to own his Ignorance, in what Sense another Man uses his Words, since he has no other way of certainly knowing it, but by being informed. This Abuse of taking Words upon Trust, has no where spread so far, nor with so ill Effects, as amongst Men of Letters. The multiplication and obstinacy of Disputes, which has so laid waste the intellectual World, is owing to nothing more, than to this ill use of Words. For though it be generally believed, that there is great diversity of Opinions in the Volumes and Variety of Controversies, the World is distracted with; yet the most I can find, that the contending learned Men of different Parties do, in their Arguings one with another, is, that they speak different Languages. For I am apt to imagine, that when any of them quitting Terms, think upon Things, and know what they think, they think all the same. Though perhaps, what they would have, be different.

§. 23. To conclude this Consideration of the Imperfection, and Abuse of Language; the ends of Language in our Discourse with others, being chiefly

chiefly these three : *First*, To make known one Man's Thoughts or *Ideas* to another. *Secondly*, To do it with as much ease and *quickness*, as is possible ; and *Thirdly*, Thereby to convey the *Knowledge* of Things. Language is either abused, or deficient, when it fails in any of these Three.

First, Words fail in the first of these Ends, and lay not open one Man's *Ideas* to another's view. *First*, When Men have names in their Mouths without any clear and distinct *Ideas* in their Minds, whereof they are the signs; or *Secondly*, When they apply the common received names of any Language to *Ideas*, to which the common use of that Language does not apply them; or *Thirdly*, When they apply them very unsteadily, making them stand now for one, and by and by for another *Idea*.

§. 24. *Secondly*, Men fail of conveying their Thoughts, with all the quickness and ease that may be, when they have complex *Ideas*, without having distinct names for them. This is sometimes the Fault of the Language it self, which has not in it a Sound yet apply'd to such a Signification : And sometimes the Fault of the Man, who has not yet learn'd the name for that *Idea* he would shew another.

§. 25. *Thirdly*, There is no Knowledge of Things conveyed by Men's Words, when their *Ideas* agree not to the Reality of Things. Though it be a Defect, that has its Original in our *Ideas*, which are not so conformable to the Nature of Things, as Attention, Study, and Application might make them : Yet it fails not to extend it self to our Words too, when we use them as Signs of real Beings, which yet never had any Reality or Existence.

§. 26. *First*, He that hath Words of any Language, without distinct *Ideas* in his Mind, to which he applies them, does, so far as he uses them in Discourse, only make a noise without any Sense or Signification ; and how learned soever he may seem by the use of hard Words, or learned Terms, is not much more advanced thereby in Knowledge, than he would be in Learning, who had nothing in his Study, but the bare Titles of Books, without possessing the Contents of them. For all such Words, however put into Discourse, according to the right Construction of Grammatical Rules, or the Harmony of well turned Periods, do yet amount to nothing but bare Sounds, and nothing else.

§. 27. *Secondly*, He that has complex *Ideas*, without particular names for them, would be in no better a Case than a Book-seller, who had in his Ware-house Volumes that lay there unbound, and without Titles ; which he could therefore make known to others, only by shewing the loose sheets, and communicate them only by Tale. This Man is hindered in his Discourse, for want of Words to communicate his complex *Ideas*, which he is therefore forced to make known by an enumeration of the simple ones that compose them ; and so is fain often to use twenty Words, to express what another Man signifies in one.

§. 28. *Thirdly*, He that uses not constantly the same Sign for the same *Idea*, but uses the same Words sometimes in one, and sometimes in another Signification, ought to pass in the Schools and Conversation, for as fair a Man, as he does in the Market and Exchange, who sells several Things under the same name.

§. 29. *Fourthly*, He that applies the Words of any Language to *Ideas*, different from those, to which the common use of that Country applies them, however his own Understanding may be filled with Truth and Light, will not by such Words be able to convey one jot of it to others, without defining. For however, the Sounds are such as are familiarly

known, and easily enter the Ears of those who are accustomed to them; yet standing for other *Ideas* than they usually make them the signs of, they cannot make known his Thoughts who uses them.

§. 30. *Fifthly*, He that hath *Ideas* of Substances, which never existed, nor have any correspondence with the real Nature of Things, to which he gives settled and defined Names, may fill his Discourse, and, perhaps, another Man's Head, with the fantastical Imaginations of his own Brain, but will be very far from advancing thereby one jot, in real and true Knowledge.

§. 31. He that hath Names without *Ideas*, wants meaning in his Words, and speaks only empty Sounds. He that hath complex *Ideas* without Names for them, wants Liberty and Dispatch in his Expressions, and is necessitated to use Periphrases. He that uses his Words loosely and unsteadily, will either be not minded, or not understood. He that applies his Names to *Ideas*, different from their common use, wants Propriety in his Language, and speaks Gibberish; And he that hath *Ideas* of Substances, disagreeing with the real Existence of Things, so far wants the Materials of true Knowledge in his Understanding, and hath, instead thereof, *Chimeras*.

§. 32. In our Notions, concerning Substances, we are liable to all the former Inconveniencies: *v.g.* 1. He that uses the word *Tarantula*, without having any Imagination or *Idea* of what it stands for, pronounces a good Word; but so long means nothing at all by it. 2. He that, in a new-discovered Country, shall see several sorts of Animals and Vegetables, unknown to him before, may have as true *Ideas* of them, as of a Horse, or a Stag; but can speak of them only by a description till he shall either take the Name the Natives call them by, or give them one himself. 3. He that uses the word *Body* sometimes for pure Extension, and sometimes for Extension and Solidity together, will talk very fallaciouſly. 4. He that gives the name *Horse*, to that *Idea* which common usage calls *Mule*, talks improperly, and will not be understood. 5. He that thinks the name *Centaur* stands for some real Being, imposes on himself, and mistakes Words for Things.

§. 33. In Modes and Relations generally, we are liable only to the four first of these Inconveniencies, (*viz.*) 1. I may have in my Memory the Names of Modes, as *Gratitude*, or *Charity*, and yet not have any precise *Ideas* annexed in my Thoughts to those Names. 2. I may have *Ideas*, and not know the Names that belong to them; *v.g.* I may have the *Idea* of a Man's drinking till his Colour and Humour be altered, till his Tongue trips, and his Eyes look red, and his Feet fail him; and yet not know, that it is to be called *Drunkenness*. 3. I may have the *Ideas* of Vertues, or Vices, and Names also, but apply them amiss: *v.g.* When I apply the name *Frugality*, to that *Idea* which others call and signify by this sound, *Covetousness*. 4. I may use any of those names with inconstancy. 5. But in Modes and Relations, I cannot have *Ideas* disagreeing to the Existence of Things: for Modes being complex *Ideas*, made by the Mind at pleasure; and Relation being but my way of considering, or comparing two Things together, and so also an *Idea* of my own making, these *Ideas* can scarce be found to disagree with any Thing existing; since they are not in the Mind, as the Copies of Things regularly made by Nature, nor as Properties inseparably flowing from the internal Constitution or Essence of any Substance; but, as it were, Patterns lodg'd in my Memory, with Names annexed to them, to denominate Actions and Relations by, as they come to exist. But the mistake is commonly in my giving a wrong name to my Conceptions; and so using Words in a different sense from other People, I am not understood, but am thought to have wrong *Ideas* of them,

them, when I give wrong Names to them. Only if I put in my *Ideas* of mixed Modes or Relations, any inconsistent *Ideas* together, I fill my Head also with *Chimæras*; since such *Ideas*, if well examined, cannot so much as exist in the Mind, much less any real Being, be ever denominated from them.

§. 34. Since Wit and Fancy finds easier entertainment in the World, than dry Truth and real Knowledge, *figurative Speeches*, and allusion in Language, will hardly be admitted, as an imperfection or *abuse* of it. I confess, in Discourses, where we seek rather Pleasure and Delight, than Information and Improvement, such Ornaments as are borrowed from them, can scarce pass for Faults. But yet, if we would speak of Things as they are, we must allow, that all the Art of Rhetorick, besides Order and Clearness, all the artificial and figurative application of Words Eloquence hath invented, are for nothing else, but to insinuate wrong *Ideas*, move the Passions, and thereby mislead the Judgment; and so indeed are perfect cheat: And therefore however laudable or allowable Oratory may render them in Harangues and popular Addresses, they are certainly, in all Discourses that pretend to inform and instruct, wholly to be avoided; and where Truth and Knowledge are concerned, cannot but be thought a great fault, either of the Language or Person that makes use of them. What, and how various they are, I shall not trouble my self to take notice; the Books of Rhetorick which abound in the World, will inform those who want to be informed: Only I cannot but observe, how little the preservation and improvement of Truth and Knowledge, is the Care and Concern of Mankind; since the Arts of Fallacy are endow'd and preferred; and 'tis plain how much Men love to deceive, and be deceived, since the great Art of Deceit and Errour, Rhetorick I mean, has its established Professors, is publickly taught, and has always been had in great Reputation. And, I doubt not, but it will be thought great boldness, if not brutality in me, to have said thus much against it. *Eloquence*, like the fair Sex, has too prevailing Beauties in it, to suffer it self ever to be spoken against: And 'tis in vain to find fault with those Arts of Deceiving, wherein Men find pleasure to be Deceived.

C H A P. XI.

Of the Remedies of the foregoing Imperfections and Abuses.

§. 1. **T**He natural and improved Imperfections of Language, we have seen above at large; and Speech being the great Bond that holds Society together, and the common Conduit, whereby the Improvements of Knowledge are conveyed from one Man, and one Generation to another, it would well deserve our most serious Thoughts, to consider what *Remedies* are to be found for these *Inconveniences* above-mentioned.

§. 2. I am not so vain to think, that any one can pretend to attempt the perfect *Reforming the Languages* of the World, no not so much as that of his own Country, without rendering himself ridiculous. To require that Men should use their Words, all in the same sense, and for clear, distinct, and uniform *Ideas*, would be to think, that all Men should have the same Notions, and should talk of nothing but what they have clear and

distinct *Ideas* of; which is not to be expected by any one, who hath not vanity enough to imagine he can prevail with Men, to be very knowing, or very silent. And he must be little skill'd in the World, who thinks that a voluble Tongue, shall accompany only a good Understanding; or that Mens talking much or little, shall hold proportion only to their Knowledge.

§. 3. But though the Market and Exchange must be left to their own ways of Talking, and Gossippings, not robb'd of their ancient Privilege; though the Schools, and Men of Argument would, perhaps, take it amiss to have any thing offered to abate the length, or lessen the number of their Disputes; yet, methinks those *who* pretend *seriously* to search after, or maintain *Truth*, should think themselves obliged to study how they might deliver themselves without Obscurity, Doubtfulness, or Equivocation, to which Mens Words are naturally liable, if care be not taken.

§. 4. For he that shall well consider the *Errours* and Obscurity, the Mistakes and Confusion, that is *spread in the World by an ill use of Words*, will find some reason to doubt, whether Language, as it has been employ'd, has contributed more to the improvement or hindrance of Knowledge amongst Mankind. How many are there, that when they would think on Things, fix their Thoughts only on Words, especially when they would apply their Minds to moral Matters? And who then can wonder, if the result of such Contemplations and Reasonings, about little more than Sounds, whilst the *Ideas* they annexed to them, are very confused, or very unsteady, or perhaps none at all; who can wonder, I say, that such Thoughts and Reasonings, end in nothing but Obscurity and Mistake, without any clear Judgment or Knowledge?

§. 5. This Inconvenience, in an ill use of Words, Men suffer in their own private Meditations: but much more manifest are the Disorders which follow from it, in Conversation, Discourse, and Arguing with others. For Language being the great Conduit, whereby Men convey their Discoveries, Reasonings, and Knowledge, from one to another, he that makes an ill use of it, though he does not corrupt the Fountains of Knowledge, which are in Things themselves; yet he does, as much as in him lies, break or stop the Pipes, whereby it is distributed to the publick use and advantage of Mankind. He that uses Words, without any clear and steady meaning, What does he but lead himself and others into *Errours*? And he that designedly does it, ought to be looked on as an Enemy to Truth and Knowledge. And yet, who can wonder, that all the Sciences and Parts of Knowledge, have been so over-charged with obscure and equivocal Terms, and insignificant and doubtful Expressions, capable to make the most attentive or quick-sighted, very little, or not at all the more knowing or Orthodox; since Subtilty, in those who make profession to teach or defend Truth, hath passed so much for a Vertue: A Vertue, indeed, which consisting, for the most part, in nothing but the fallacious and illusory use of *obscure* or *deceitful Terms*, is only fit to make Men more *conceited* in their Ignorance, and *obstinate* in their *Errours*.

§. 6. Let us look into the Books of Controversies of any kind, there we shall see, that the effect of obscure, unsteady, or equivocal Terms, is nothing but noise and wrangling about Sounds, without convincing or bettering a Man's Understanding. For if the *Idea* be not agreed on, betwixt the Speaker and Hearer, for which the Words stand, the Argument is not about Things, but Names. As often as such a Word, whose Signification is not ascertained betwixt them, comes in use, their Under-

Understandings have no other Object wherein they agree, but barely the Sound, the Things that they think on at that time, as expressed by that Word, being quite different.

§. 7. Whether a *Bat* be a *Bird*, or no, is not a question, whether a *Bat* be another Thing than indeed it is, or have other Qualities than indeed it has, for that would be extremely absurd to doubt of: But the question is, 1. Either between those that acknowledged themselves to have but imperfect *Ideas* of one or both of those sorts of Things, for which these Names are supposed to stand; and then it is a real enquiry, concerning the Nature of a *Bird*, or a *Bat*, to make their yet imperfect *Ideas* of it more complete, by examining, whether all the simple *Ideas*, to which combined together, they both give the name *Bird*, be all to be found in a *Bat*: But this is a Question only of Enquirers, (not Disputers,) who neither affirm, nor deny, but examine: Or, 2. It is a Question between Disputants; whereof the one affirms, and the other denies, that a *Bat* is a *Bird*: And then the Question is barely about the Signification of one, or both these Words; in that they not having both the same complex *Ideas*, to which they give these two Names, one holds, and t'other denies, that these two names may be affirmed one of another. Were they agreed in the Signification of these two Names, it were impossible they should dispute about them: For they would presently and clearly see, (were that adjusted between them,) whether all the simple *Ideas*, of the more general name *Bird*, were found in the complex *Idea* of a *Bat*, or no; and so there could be no doubt, whether a *Bat* were a *Bird*, or no. And here I desire it may be considered, and carefully examined, whether the greatest part of the Disputes in the World, are not meerly Verbal, and about the Signification of Words; and that if the terms they are made in, were defined, and reduced in their Signification (as they must be, where they signify any thing) to the simple *Ideas* they stand for, those Disputes would not end of themselves, and immediately vanish. I leave it then to be considered, what the learning of Disputation is, and how well they are employ'd for the advantage of themselves, or others, whose business is only the vain ostentation of Sounds; *i. e.* those who spend their Lives in Disputes and Controversies. When I shall see any of those Combatants, strip all his Terms of Ambiguity and Obscurity, (which every one may do, in the Words he uses himself, as far as he has clear and distinct Notions to which he applies them,) I shall think him a Champion for Knowledge, Truth, and Peace, and not the Slave of Vain-glory, Ambition, or a Party.

§. 8. To remedy the Defects of Speech before-mentioned, to some degree, and to prevent the Inconveniencies that follow from them, I imagine, the observation of these following Rules may be of use, till some body better able shall judge it worth his while, to think more maturely on this matter, and oblige the World with his Thoughts on it.

First, A Man should take care to use no Word without a signification, no Name without an *Idea* for which he makes it stand. This Rule will not seem altogether needless, to any one who shall take the pains to recollect how often he has met with such Words; as *Instinct*, *Sympathy*, and *Antipathy*, &c. in the Discourse of others, so made use of, as he might easily conclude, that those that used them, had no *Ideas* in their Minds to which they applied them; but spoke them only as Sounds, which usually served instead of Reasons, on the like occasions. Not but that these Words, and the like, have and may be used, in very proper Significations; but there being no natural connexions between any Words, and any

any *Ideas*, these, and any other, may be learn'd by rote, and pronounced or writ by Men, who have no *Ideas* in their Minds, to which they have annexed them, and for which they make them stand; which is necessary they should, if Men should speak intelligibly, even to themselves alone.

§. 9. *Secondly*, 'Tis not enough a Man *uses* his *Words*, as *signs* of some *Ideas*; those *Ideas* he annexes them to, must be *clear and distinct*: which in complex *Ideas*, is the knowing the particular ones that make that composition, of which, if any one be again complex, 'tis the knowing also the precise Collection, that is united in each, and so till we come to simple ones. This is very necessary in Names of Modes, and especially moral Words; which having no settled Objects in Nature, from whence their *Ideas* are taken, as from their Originals, are apt to be very confused. *Justice* is a Word in every Man's mouth, but most commonly with a very undetermined loose signification: which will always be so, unless a Man has in his Mind a distinct comprehension of the component parts that complex *Idea* consists of; and if it be decomposed, must be able to resolve it still on, till he at last comes to the simple *Ideas* that make it up: And unless this be done, a Man makes an ill use of the Word, let it be *Justice*, for example, or any other. I do not say, a Man needs stand to recollect, and make this Analysis at large, every time the word *Justice* comes in his way: But this, at least, is necessary, that he have so examined the signification of that Name, and settled the *Idea* of all its Parts in his Mind, that he can do it when he pleases. If one, who makes his complex *Idea* of *Justice*, to be such a treatment of the Person or Goods of another, as is according to Law, hath not a clear and distinct *Idea* what *Law* is, which makes a part of his complex *Idea* of *Justice*, 'tis plain, his *Idea* of *Justice* it self, will be confused and imperfect. This exactness will, perhaps, be judged very troublesome; and therefore most Men will think, they may be excused from settling the complex *Ideas* of mixed Modes so precisely in their Minds. But yet I must say, till this be done, it must not be wondred, they have a great deal of Obscurity and Confusion in their own Minds, and a great deal of wrangling in their Discourses with others.

§. 10. In *Substances*, something more is required, than the distinct *Ideas* their Names stand for, they *must also be conformable to Things*, as they exist: But of this, I shall have occasion to speak more at large by and by. This Exactness is absolutely necessary in Enquiries, after philosophical Knowledge and Controversies about Truth. And though it would be well too, if it extended it self to common Conversation, and the ordinary Affairs of Life; yet I think, that is scarce to be expected. Vulgar Notions suit vulgar Discourses; and both, though confused enough, yet serve pretty well the Market, and the Wake. Merchants and Lovers, Cooks and Taylors, have Words wherewithal to dispatch their ordinary Affairs; and so, I think, might Philosophers and Disputants too, if they had a mind to understand, and to be clearly understood.

§. 11. *Thirdly*. 'Tis not enough that Men have *Ideas*, clear and distinct *Ideas*, for which they make these signs stand: But they *must also* take care to *apply their Words*, as near as may be, to such *Ideas* as common use has annexed them to. For Words, especially of Languages already framed, being no Man's private possession, but the common measure of Commerce and Communication, 'tis not for any one, at pleasure, to change the Stamp they are current in; nor alter the *Ideas* they are affixed to; or at least when there is a necessity to do so, he is bound to give notice

rice of it. Men's intentions in speaking are, or at least should be, to be understood, which cannot be without the frequent Explanations, Demands, and other the like incommodious Interruptions, where Men do not follow common Use. Propriety of Speech, is that which gives our Thoughts entrance into other Men's Minds, with the greatest ease and advantage; and therefore deserves some part of our Care and Study, especially in the names of moral Words, whose proper use is to be learn'd from those, who in their Writings and Discourses, appear to have had the clearest Notions, and apply'd to them their Terms, with the best Choice and Clearness. This way of using a Man's Words, according to the Propriety of the Language, though it have not always the good Fortune to be understood: Yet most commonly leaves the blame of it on him, who is so unskilful in the Language he speaks, as not to understand it, when made use of, as it ought to be.

§. 12. *Fourthly*. But because common use has not so visibly annexed any signification to Words, as to make Men know always certainly what they precisely stand for: And because Men in the Improvement of their Knowledge, come to have *Ideas* different from the vulgar, and ordinary received ones, for which they must either make new Words, (which Men seldom venture to do, for fear of being thought guilty of Affectation, or Novelty,) or else *must* use old ones, in a new Signification. Therefore after the Observation of the foregoing Rules, it is sometimes necessary, for the ascertaining the signification of Words, to *declare their Meaning*; where either common Use, has left it uncertain and loose; (as it has in most names of very complex *Ideas*;) or where a Man uses them, in a Sense any way peculiar to himself; or where the Term being very material in the Discourse, and that upon which it chiefly turns, is liable to any Doubtfulness, or Mistake.

§. 13. As the *Ideas*, Men's Words stand for, are of different sorts; so the way of making known the *Ideas*, they stand for, when there is Occasion, is also different. For though defining be thought the proper way, to make known the proper Signification of Words; yet there be some Words, that will not be defined, as there be others, whose precise Meaning cannot be made known, but by Definition: and, perhaps, a third, which partake somewhat of both the other, as we shall see in the names of simple *Ideas*, Modes, and Substances.

§. 14. *First*, When a Man makes use of the name of any simple *Idea*, which he perceives is not understood, or is in danger to be mistaken, he is obliged by the Laws of Ingenuity, and the end of Speech, to declare its Meaning, and make known what *Idea* he makes it stand for. This as has been shewed, cannot be done by Definition; and therefore, when a synonymous Word fails to do it, there is but one of these ways left. *First*, Sometimes the naming the Subject, wherein that simple *Idea* is to be found, will make its name be understood by those, who are acquainted with that Subject, and know it by that name. So to make a Countryman understand what *Feuilmorte* Colour signifies, it may suffice to tell him, 'tis the Colour of wither'd Leaves falling in Autumn. *Secondly*, But the only sure way of making known the signification of the name of any simple *Idea*, is by presenting to his Senses that Subject, which may produce it in his Mind, and make him actually have the *Idea* that Word stands for.

§. 15. *Secondly*, *Mixed Modes*, especially those belonging to Morality, being most of them such Combinations of *Ideas*, as the Mind puts together of its own choice; and whereof they are not always standing Pat-

terns

terns to be found existing, the signification of their names cannot be made known, as those of simple *Ideas*, by any shewing; but in recompence thereof, may be perfectly and exactly *defined*. For they being Combinations of several *Ideas*, that the Mind of Man has arbitrarily put together, without reference to any Archetypes, Men may, if they please, exactly know the *Ideas*, that go to each Composition, and so both use these Words, in a certain and undoubted Signification, and perfectly declare when there is Occasion, what they stand for. This, if well considered, would lay great blame on those, who make not their Discourses about moral Things very clear and distinct. For since the precise signification of the names of mixed Modes, or which is all one, the real Essence of each Species, is to be known, they being not of Nature's, but Man's making, it is a great Negligence and Perverseness, to discourse of moral Things with Uncertainty and Obscurity, which is much more pardonable, in treating of natural Substances, where doubtful Terms are hardly to be avoided, for a quite contrary Reason, as we shall see by and by.

§. 16. Upon this ground it is, that I am bold to think, that *Morality is capable of Demonstration*, as well as Mathematicks: Since the precise real Essence of the Things moral Words stand for, may be perfectly known; and so the Congruity, or Incongruity of the Things themselves, be certainly discovered, in which consists perfect Knowledge. Nor let any one object, that the names of Substances are often to be made use of in Morality, as well as those of Modes, from which will arise Obscurity. For as to Substances, when concerned in moral Discourses, their divers Natures are not so much enquir'd into, as supposed; *v. g.* when we say that Man is subject to Law: We mean nothing by Man, but a corporeal rational Creature: What the real Essence, or other Qualities of that Creature are in this Case, is no way considered: And therefore, whether a Child or Changeling, be a Man in a physical Sense, may amongst the Naturalists be as disputable as it will, it concerns not at all the moral Man, as I may call him, which is this immoveable unchangeable *Idea*, a corporeal rational Being. For were there a Monkey, or any other Creature to be found, that had the use of Reason, to such a degree, as to be able to understand general Signs, and to deduce Consequences about general *Ideas*, he would no doubt be subject to Law, and, in that Sense, be a Man, how much soever he differ'd in shape from others of that Name. The names of Substances, if they be used in them, as they should, can no more disturb Moral, than they do Mathematical Discourses: Where, if the Mathematicians speak of a Cube or Globe of Gold, or any other Body, he has his clear settled *Idea*, which varies not, though it may, by mistake, be apply'd to a particular Body, to which it belongs not.

§. 17. This, I have here mentioned by the bye, to shew of what Consequence it is for Men, in their names of mixed Modes, and consequently, in all their moral Discourses, to define their Words when there is Occasion: Since thereby moral Knowledge may be brought, to so great Clearness and Certainty. And it must be great want of Ingenuity, (to say no worse of it,) to refuse to do it: Since a *Definition is the only way*, whereby the precise Meaning of moral Words can be known; and yet a way, whereby their Meaning may be known certainly, and without leaving any room for any contest about it. And therefore the Negligence or Perverseness of Mankind, cannot be excused, if their Discourses in Morality be not much more clear, than those in natural Philosophy: since they are about *Ideas* in the Mind, which are none of them false, nor disproportionate; they having no external Beings for Archetypes which they are refer'd

ferred to, and must correspond with. It is far easier for Men to frame in their Minds an *Idea*, which shall be the Standard to which they will give the name *Justice*; with which Pattern so made, all Actions that agree, shall pass under that denomination, than having seen *Aristides* to frame an *Idea*, that shall in all things be exactly like him, who is as he is, let Men make what Notion, or *Idea*, they please of him. For the one, they need but know the *Ideas* they frame within themselves: for the other, they must enquire into the whole Nature, and abstruse hidden Constitution, and Qualities of a Thing existing without them.

§. 18. Another Reason that makes the *defining of mixed Modes* so necessary, especially of *moral Words*, is what I mentioned a little before; and that is, That it is *the only way whereby the signification of the most of them can be known with certainty*. For the *Ideas* they stand for, being for the most part such, whose component Parts no-where exist together, but scattered and mingled with others, it is the Mind alone that collects them, and gives them the union of one *Idea*: and it is only by Words, enumerating the several simple *Ideas* which the Mind has united, that we can make known to others, what their Names stand for; and not by any application to the Senses, as we can do in sensible simple *Ideas*, and also to some degree in Substances.

§. 19. *Thirdly, For the explaining the signification of the Names of Substances* as they stand for the *Ideas* we have of their distinct Species, both the fore-mentioned ways, viz. of *showing and defining*, are requisite, in many cases, to be made use of. For there being ordinarily in each Sort some leading Qualities, to which we suppose the other, which makes up our complex *Idea* of that Species, annexed, we give the Name to some Quality, or *Idea*, which is the most observable, and we take to be the most distinguishing *Idea* of that Species. These leading, or characteristic (as I may so call them) *Ideas*, in the sorts of Animals and Vegetables, is (as has been before remarked) mostly Figure, and in inanimate Bodies Colour, and in some both together. Now,

§. 20. These *leading sensible Qualities* are those, which make the *chief Ingredients of our specifick Ideas*, and consequently the best Definitions of our specifick Names, as attributed to Sorts of *Substances* coming under our Knowledge. For though the Sound *Man*, in its own Nature, be as apt to signify a complex *Idea*, made up of Animality and Rationality, united in the same Subject, as to signify any other combination; yet used as a mark to stand for a sort of Creatures we count of our own kind; perhaps, the outward shape is as necessary to be taken into our complex *Idea*, signified by the word *Man*, as any other we find in it. And therefore why *Plato's Animal implume Bipes latis unguibus*, should not be as good a Definition of the Name *Man*, standing for that sort of Creatures, will not be easie to shew: for 'tis the Shape, as the leading Quality, that seems more to determine that Species, than a Faculty of Reasoning, which appears not at first, and in some never. And if this be not allow'd to be so, I do not know how they can be excused from Murther, who kill monstrous Births, (as we call them,) because of an unordinary Shape, without knowing whether they have a Rational Soul, or no; which can be no more discerned in a well-formed, than ill-shaped Infant, as soon as born. And who is it has informed us, that a Rational Soul can inhabit no Tenement, unless it has just such a sort of Frontispiece, or can join it self to, and inform no sort of Body, but one that is just of such an outward Structure?

§. 21. Now *these leading Qualities, are best made known by shewing, and can hardly be made known otherwise.* For the shape of an *Horse*, or *Cassuary*, will be but rudely and imperfectly imprinted on the Mind by Words, the sight of the Animals doth it a thousand times better: And the *Idea* of the particular Colour of Gold, is not to be got by any description of it, but only by the frequent exercise of the Eyes about it; as is evident in those who are used to this Metal, who will frequently distinguish true from counterfeit, pure from adulterate, by the sight, where others (who have as good Eyes, but yet, by use, have not got the precise nice *Idea* of that peculiar Yellow) shall not perceive any difference. The like may be said of those other simple *Ideas*, peculiar in their kind to any Substance; for which precise *Ideas*, there are no peculiar Names. The particular ringing sound there is in Gold, distinct from the sound of other Bodies, has no particular Name annexed to it, no more than the particular Yellow that belongs to that Metal.

§. 22. But because many of the simple *Ideas* that make up our specifick *Ideas* of Substances, are Powers, which lie not obvious to our Senses in the Things as they ordinarily appear; therefore, in the signification of our Names of Substances, some part of the signification will be better made known, by enumerating those simple *Ideas*, than in shewing the Substance it self. For he that, to the yellow shining Colour of Gold got by sight, shall, from my enumerating them, have the *Ideas* of great Ductility, Fusibility, Fixedness, and Solubility, in *Aq. Regia*, will have a perfecter *Idea* of Gold, than he can have by seeing a piece of Gold, and thereby imprinting in his Mind only its obvious Qualities. But if the formal Constitution of this shining, heavy, ductil Thing (from whence all these its Properties flow) lay open to our Senses, as the formal Constitution, or Essence of a Triangle does, the signification of the word *Gold*, might as easily be ascertained, as that of *Triangle*.

§. 23. Hence we may take notice, how much the foundation of all our Knowledge of corporeal Things, lies in our Senses. For how Spirits, separate from Bodies, (whose Knowledge and *Ideas* of these Things, is certainly much more perfect than ours,) know them, we have no Notion, no *Idea* at all: The whole extent of our Knowledge, or Imagination, reaches not beyond our own *Ideas*, limited to our ways of Perception. Though yet it be not to be doubted, that Spirits of a higher rank than those immersed in Flesh, may have as clear *Ideas* of the radical Constitution of Substances, as we have of a Triangle, and so perceive how all their Properties and Operations flow from thence: but the manner how they come by that Knowledge, exceeds our Conceptions.

§. 24. But though Definitions will serve to explain the Names of Substances, as they stand for our *Ideas*; yet they leave them not without great imperfection, as they stand for Things. For our Names of Substances being not put barely for our *Ideas*, but being made use of ultimately to represent Things, and so are put in their place, their signification must agree with the Truth of Things, as well as with Mens *Ideas*: And therefore in Substances, we are not always to rest in the ordinary complex *Idea*, commonly received as the signification of that Word, but to go a little farther, and enquire into the Nature and Properties of the Things themselves, and thereby perfect, as much as we can, our *Ideas* of their distinct Species; or else learn them from such as are used to that sort of Things, and are experienced in them. For since 'tis intended their Names should stand for such Collections of simple *Ideas*, as do really exist in Things themselves, as well as for the complex *Idea* in other Mens Minds,

Minds, which in their ordinary acceptation they stand for : therefore to define their Names right, natural History is to be enquired into ; and their Properties are, with care and examination, to be found out. For it is not enough for the avoiding Inconveniencies in Discourses and Arguings about natural Bodies, and substantial Things, to have learned, from the Propriety of the Language, the common but confused, or very imperfect *Idea*, to which each Word is applied, and to keep them to that *Idea* in our use of them : but we must, by acquainting our selves with the History of that sort of Things, rectifie and settle our complex *Idea*, belonging to each specifick Name ; and in discourse with others, (if we find them mistake us,) we ought to tell what the complex *Idea* is, that we make such a Name stand for. This is the more necessary to be done, by all those who search after Knowledge, and philosophical Verity, in that Children, being taught Words whilst they have but imperfect Notions of Things, apply them at random, and without much thinking or framing clear distinct *Ideas* ; which Custom, (it being easie, and serving well enough for the ordinary Affairs of Life and Conversation,) they are apt to continue, when they are Men : And so begin at the wrong end, learning Words first ; and perfectly, but make the Notions, to which they apply those Words afterwards, very overtly. By this means it comes to pass, that Men speaking the proper Language of their Country, *i. e.* according to Grammar-Rules of that Language, do yet speak very improperly of Things themselves ; and by their arguing one with another, make but small progress in the discoveries of useful Truths, and the knowledge of Things, as they are to be found in themselves, and not in our Imaginations ; and it matters not much, for the improvement of our Knowledge, how they are call'd.

§. 25. It were therefore to be wished, That Men, versed in physical Enquiries, and acquainted with the several sorts of natural Bodies, would set down those simple *Ideas*, wherein they observe the Individuals of each sort constantly to agree. This would remedy a great deal of that confusion, which comes from several Persons, applying the same Name to a Collection of a smaller, or greater number of sensible Qualities, proportionably as they have been more or less acquainted with, or accurate in examining the Qualities of any sort of Things, which come under one denomination. But a Dictionary of this sort, containing, as it were, a Natural History, requires too many hands, as well as too much time, cost, pains, and sagacity, ever to be hoped for ; and till that be done, we must content our selves with such Definitions of the Names of Substances, as explain the sense Men use them in. And 'twould be well, where there is occasion, if they would afford us so much. This yet is not usually done ; but Men talk to one another, and dispute in Words, whose meaning is not agreed between them, out of a mistake, that the signification of common Words, are certainly established, and the precise *Ideas*, they stand for, perfectly known ; and that it is a shame to be ignorant of them. Both which Suppositions are false ; no Names of complex *Ideas* having so settled determined Significations, that they are constantly used for the same precise *Ideas*. Nor is it a shame for a Man not to have a certain knowledge of any thing, but by the necessary ways of attaining it ; and so it is no discredit not to know what precise *Idea* any Sound stands for, in another Man's Mind, without he declare it to me by some other way, than barely using that Sound ; there being no other way, without such a Declaration, certainly to know it. Indeed, the necessity of Communication by Language, brings Men to an agreement in the

signification of common Words, within some tolerable latitude, that may serve for ordinary Conversation; and so a Man cannot be supposed wholly ignorant of the *Ideas* which are annexed to Words, by common Use, in a Language familiar to him. But common Use, being but a very uncertain Rule, which reduces it self at last to the *Ideas* of particular Men, proves often but a very variable Standard. But though such a Dictionary, as I have above mentioned, will require too much time, cost, and pains, to be hoped for in this Age; yet, methinks, it is not unreasonable to propose, that Words standing for Things which are known, and distinguished by their outward shapes, should be expressed by little Draughts and Prints made of them. A Vocabulary made after this fashion, would, perhaps, with more ease, and in less time, teach the true signification of many Terms, especially in Languages of remote Countries or Ages, and settle truer *Ideas* in Mens Minds, of several Things, whereof we read the Names in ancient Authors, than all the large and laborious Comments of learned Criticks. Naturalists, that treat of Plants and Animals, have found the benefit of this way: And he that has had occasion to consult them, will have reason to confess, that he has a clearer *Idea* of *Apium*, or *Ibex*; from a little Print of that Herb, or Beast, than he could have from a long definition of the Names of either of them. And so, no doubt, he would have of *Strigil* and *Sistrum*, if instead of a *Curry-comb*, and *Cymbal*, which are the English names Dictionaries render them by, he could see stamp'd in the Margin, small Pictures of these Instruments, as they were in use amongst the Ancients. *Toga*, *Tunica*, *Pallium*, are Words easily translated by *Gown*, *Coat*, and *Cloak*; but we have thereby no more true *Ideas* of the fashion of those Habits amongst the *Romans*, than we have of the Faces of the Taylors who made them. Such Things as these, which the Eye distinguishes by their shapes, would be best let into the Mind by Draughts made of them, and more determine the signification of such Words, than any other Words set for them, or made use of to define them. But this only by the bye.

§. 26. *Fifthly*, If Men will not be at the pains to declare the meaning of their Words, and Definitions of their Terms, are not to be had; yet this is the least that can be expected, that in all Discourses, wherein one Man pretends to instruct or convince another, he should use the same Word constantly in the same sense. If this were done, (which no body can refuse without great dissingenuity,) many of the Books extant, might be spared; many of the Controversies in Dispute would be at an end; several of those great Volumes, swollen with ambiguous Words, now used in one sense, and by and by in another, would shrink into a very narrow compass, and many of the Philosophers, (to mention no others,) as well as Poets Works, might be contained in a Nut-shell.

§. 27. But after all, Words are so scanty in respect of that infinite variety is in Mens Thoughts, that Men, wanting Terms to suit their precise Notions, will, notwithstanding their utmost caution, be forced often to use the same Word, in somewhat different senses: And though in the continuation of a Discourse, or the pursuit of an Argument, there be hardly room to digress into a particular Definition, as often as a Man varies the signification of any Term; yet the import of the Discourse will, for the most part, if there be no designed fallacy, sufficiently lead candid and intelligent Readers, into the true meaning of it: but where that is not sufficient to guide the Reader, there it concerns the Writer to explain his meaning, and shew in what sense he there uses that Term.

BOOK IV.

CHAP. I.

Of Knowledge in general.

§. 1. **S**ince the Mind, in all its Thoughts and Reasonings; hath no other immediate Object but its own Ideas, which it alone does or can contemplate, it is evident, that our Knowledge is only conversant about them.

§. 2. Knowledge then seems to me to be nothing but the perception of the connexion and agreement, or disagreement and repugnancy of any of our Ideas. In this alone it consists. Where this Perception is, there is Knowledge; and where it is not, there, though we may fancy, guess, or believe, yet we always come short of Knowledge. For when we know that White is not Black, what do we else but perceive, that these two Ideas do not agree? When we possess our selves with the utmost security of the Demonstration, that the three Angles of a Triangle are equal to two right ones, What do we more but perceive, that Equality to two right ones, does necessarily agree to, and is inseparable from the three Angles of a Triangle?

§. 3. But to understand a little more distinctly, wherein this Agreement or Disagreement consists, I think we may reduce it all to these four sorts:

1. Identity, or Diversity.
2. Relation.
3. Co-existence, or necessary Connexion.
4. Real Existence.

§. 4. First, As to the first sort of Agreement or Disagreement, viz. Identity, or Diversity. 'Tis the first Act of the Mind, when it has any Sentiments, or Ideas at all, to perceive its Ideas, and so far as it perceives them, to know each what it is, and thereby also to perceive their difference, and that one is not another. This is so absolutely necessary, that without it there could be no Knowledge, no Reasoning, no Imagination, no distinct Thoughts at all. By this the Mind clearly and infallibly perceives each Idea to agree with it self, and to be what it is; and all distinct Ideas to disagree, i. e. the one not to be the other: And this it does without any pains, labour, or deduction; but at first view, by its natural power of Perception and Distinction. And though Men of Art have reduced this into those general Rules, *What is, is; and it is impossible for the same thing to be, and not to be*, for ready application in all cases, wherein there may be occasion to reflect on it; yet it is certain, that the first exercise of this Faculty, is about particular Ideas. A Man infallibly knows, as soon as ever he has them in his Mind, that the Ideas he calls White and Round, are the very Ideas they are, and that they are not other Ideas which he calls Red or Square. Nor can any Maxim or Proposition in the World make him know it clearer

or surer than he did before, or without any such general Rule. This then is the first agreement, or disagreement, which the Mind perceives in its *Ideas*; which it always perceives at first sight: And if there ever happen any doubt about it, twill always be found to be about the Names, and not the *Ideas* themselves, whose Identity and Diversity will always be perceived, as soon and as clearly, as the *Ideas* themselves are, nor can it possibly be otherwise.

§. 5. *Secondly*, The next sort of Agreement, or Disagreement, the Mind perceives in any of its *Ideas*, may, I think, be called Relative, and is nothing but the Perception of the Relation between any two *Ideas*, of what kind soever, whether Substances, Modes, or any other. For since all distinct *Ideas* must eternally be known not to be the same, and so be universally and constantly denied one of another, there could be no room for any positive Knowledge at all, if we could not perceive any Relation between our *Ideas*, and find out the Agreement or Disagreement; they have one with another, in several ways the Mind takes of comparing them.

§. 6. *Thirdly*, The third sort of Agreement, or Disagreement, to be found in our *Ideas*, which the Perception of the Mind is employ'd about, is Co-existence, or non-Co-existence in the same Subject; and this belongs particularly to Substances. Thus when we pronounce concerning Gold, that it is fixed, our Knowledge of this Truth amounts to no more but this, that Fixedness, or a power to remain in the Fire unconsumed, is an *Idea*, that always accompanies; and is join'd with that particular sort of Yellowness, Weight, Fusibility, Malleableness, and Solubility in *Aq. Regia*, which make our complex *Idea*, signified by the word *Gold*.

§. 7. *Fourthly*, The fourth and last sort is, that of actual real Existence agreeing to any *Idea*. Within these four sorts of Agreement or Disagreement, is, I suppose contained all the Knowledge we have, or are capable of: For all the Enquiries that we can make, concerning any of our *Ideas*, all that we know, or can affirm concerning any of them, is, That it is, or is not, the same with some other; that it does, or does not always co-exist with some other *Idea* in the same Subject; that it has this or that Relation to some other *Idea*; or that it has a real Existence without the Mind. Thus *Blue is not Yellow*, is of Identity. *Two Triangles upon equal Basis, between two Parallels, are equal*, is of Relation. *Iron is susceptible of magnetical Impressions*, is of Co-existence. *GOD is*, is of real Existence. Though Identity and Co-existence are truly nothing but Relations, yet they are so peculiar ways of Agreement, or Disagreement of our *Ideas*, that they deserve well to be considered as distinct Heads, and not under Relation in general; since they are so different grounds of Affirmation and Negation, as will easily appear to any one, who will but reflect on what is said in several places of this Essay. I should now proceed to examine the several degrees of our Knowledge, but that it is necessary first, to consider the different acceptations of the word *Knowledge*.

§. 8. There are several ways wherein the Mind is possessed of Truth, each of which is called *Knowledge*.

1. There is *actual Knowledge*, which is the present view the Mind has of the Agreement, or Disagreement of any of its *Ideas*, or of the Relation they have one to another.

2. A Man is said to know any Proposition, which having been once laid before his Thoughts, he evidently perceived the Agreement, or Disagreement of the *Ideas* whereof it consists; and so lodg'd it in his Memory, that when-

whenever that Proposition comes again to be reflected on, he, without doubt or hesitation, embraces the right side; assents to, and is certain of the Truth of it. This, I think, one may call *habitual Knowledge*: And thus a Man may be said to know all those Truths, which are lodg'd in his Memory, by a foregoing clear and full perception, whereof the Mind is assured past doubt, as often as it has occasion to reflect on them. For our finite Understandings being able to think, clearly and distinctly, but on one thing at once, if Men had no Knowledge of any more than what they actually thought on, they would all be very ignorant: and he that knew most, would know but one Truth, that being all he was able to think on at one time.

§. 9. Of habitual Knowledge, there are also, vulgarly speaking, two degrees:

First, The one is of *such Truths laid up in the Memory, as whenever they occur to the Mind, it actually perceives the Relation is between those Ideas*. And this is in all those Truths, whereof we have an intuitive Knowledge, where the *Ideas* themselves, by an immediate view, discover their Agreement, or Disagreement one with another.

Secondly, The other is of *such Truths, whereof the Mind having been convinced, it retains the memory of the Conviction, without the Proofs*. Thus a Man that remembers certainly; that he once perceived the Demonstration, that the three Angles of a Triangle are equal to two right ones, is commonly allow'd to know it, because he cannot doubt of the truth of it. But yet having forgot the Demonstration, strictly speaking, he rather believes his Memory, than knows the thing; or rather it is something between Opinion and Knowledge, a sort of assurance that exceeds bare Belief, which relies on the Testimony of another, and yet comes short of perfect Knowledge. For Knowledge consisting in a clear Perception of the Relation of any two *Ideas*, either by an immediate *juxta-Position*, as in intuitive Knowledge; or by the intervention of other *Ideas*, which do immediately discover their Relation one to another, as in Demonstration, the Mind cannot, in strictness, be said to have so much as an habitual Knowledge, where it has not an habitual View of the Proofs; where it has not such a Memory of the Demonstration, that it can, when that Proposition is again recall'd to the Mind, perceive the connexion of those *Ideas*, by the intervention of such other *Ideas*, whose immediate connexion, or relation one to another, shew the relation of the Extremes. And hence it is, that demonstrative Knowledge, is much more imperfect than Intuitive, as we shall see in the following Chapter.

C H A P. II.

Of the Degrees of our Knowledge.

§. 1. **A**LL our Knowledge consisting, as I have said, in the view the Mind has of its own *Ideas*, which is the utmost Light and greatest Certainty, we with our Faculties, and in our way of Knowledge are capable of, it may not be amiss, to consider a little the degrees of its Evidence. The different clearness of our Knowledge seems to me to lie in the different way of Perception, the Mind has of the Agreement, or Disagreement of any of its *Ideas*. For if we will reflect on our own ways of Thinking, we shall find, that sometimes the Mind perceives the Agreement or Disagreement of two *Ideas* immediately by themselves, without the intervention of any other: And this, I think, we may call *intuitive Knowledge*. For in this, the Mind is at no pains of proving or examining, but perceives the Truth, as the Eye doth Light, only by being directed toward it. Thus the Mind perceives, that *White* is not *Black*, That a *Circle* is not a *Triangle*, That *Three* are more than *Two*, and equal to *One and Two*. Such kind of Truths, the Mind perceives at the first Sight of the *Ideas* together, by bare intuition, without the intervention of any other *Idea*; and this kind of Knowledge is the clearest, and most certain, that humane Frailty is capable of. This part of Knowledge is irresistible, and like the bright Sun-shine, forces it self immediately to be perceived, as soon as ever the Mind turns its view that way; and leaves no room for Hesitation, Doubt, or Examination, but the Mind is presently filled with the clear Light of it. 'Tis on this Intuition, that depends all the Certainty and Evidence of all our Knowledge, which Certainty every one finds to be so great, that he cannot imagine, and therefore not require a greater: For a Man cannot conceive himself capable of a greater Certainty, than to know that any *Idea* in his Mind is such, as he perceives it to be; and that two *Ideas*, wherein he perceives a difference, are different, and not precisely the same. He that demands a greater Certainty than this, demands he knows not what; and shews only that he has a Mind to be a Sceptick, without being able to be so. Certainty depends so wholly on this Intuition, that in the next degree of Knowledge, which I call *Demonstrative*, this intuition is necessary in all the Connexions of the intermediate *Ideas*, without which we cannot attain Knowledge and Certainty.

§. 2. The next degree of Knowledge is, where the Mind perceives the Agreement or Disagreement of any *Ideas*, but not immediately. Though where-ever the Mind perceives the Agreement or Disagreement of any of its *Ideas*, there be certain Knowledge: Yet it does not always happen, that the Mind sees that Agreement or Disagreement, which there is between them, even where it is discoverable; and in that case, remains in Ignorance, or at most, gets no farther than a probable conjecture. The Reason why the Mind cannot always perceive presently the Agreement or Disagreement of two *Ideas* is, because those *Ideas*, concerning whose Agreement or Disagreement the Enquiry is made, cannot by the Mind be so put together, as to shew it. In this Case then, when the Mind cannot so bring it's *Ideas* together, as by their immediate Comparison, and as it were Juxta-position, or application one to another, to perceive their Agreement or Disagreement, it is fain, by the Intervention of other *Ideas* (one or more, as it happens) to discover the Agreement or Disagreement, which it searches; and this is that which we call *Reasoning*.

ing. Thus the Mind being willing to know the Agreement or Disagreement in bigness, between the three Angles of a Triangle, and two right ones, cannot by an immediate view and comparing them, do it : Because the three Angles of a Triangle cannot be brought at once, and be compared with any other one, or two Angles; and so of this the Mind has no immediate, no intuitive Knowledge. In this Case the Mind is fain to find out some other Angles, to which the three Angles of a Triangle have an Equality; and finding those equal to two right ones, comes to know their Equality to two right ones.

§. 3. Those intervening *Ideas*, which serve to shew the Agreement of any two others, are called *Proofs*; and where the Agreement or Disagreement is by this means plainly and clearly perceived, it is called *Demonstration*, it being shewn to the Understanding, and the Mind made see that it is so. A quickness in the Mind to find out these intermediate *Ideas*, (that shall discover the Agreement or Disagreement of any other,) and to apply them right, is, I suppose, that which is called *Sagacity*.

§. 4. *This Knowledge by intervening Proofs*, though it be certain, yet the Evidence of it is *not* altogether so clear and bright, nor the assent so ready, as in *intuitive Knowledge*. For though in *Demonstration*, the Mind does at last perceive the Agreement or Disagreement of the *Ideas* it considers; yet 'tis not without Pains and Attention: There must be more than one transient view to find it. A steady application and pursuit, is required to this Discovery: And there must be a Progression by steps and degrees, before the Mind can in this way arrive at Certainty, and come to perceive the Agreement or Repugnancy between two *Ideas* that need Proofs, and the Use of Reason to shew it.

§. 5. *Another difference between intuitive and demonstrative Knowledge*, is, that though in the latter all doubt be removed, when by the Intervention of the intermediate *Ideas*, the Agreement or Disagreement is perceived; yet before the *Demonstration* there was a doubt, which in intuitive Knowledge cannot happen to the Mind that has its Faculty of Perception left to a degree capable of distinct *Ideas*, no more than it can be a doubt to the Eye, (that can distinctly see White and Black,) Whether this Ink, and this Paper be all of a Colour. If there be Sight in the Eyes, it will at first glimpse, without Hesitation, perceive the Words printed on this Paper, different from the Colour of the Paper: And so if the Mind have the Faculty of distinct Perception, it will perceive the Agreement or Disagreement of those *Ideas* that produce intuitive Knowledge. If the Eyes have lost the Faculty of seeing, or the Mind of perceiving, we in vain enquire after the quickness of Sight in one, or clearness of Perception in the other.

§. 6. 'Tis true the Perception, produced by demonstration, is also very clear; but yet it is often with a great abatement of that evident lustre and full assurance that always accompany that which I call intuitive; like a Face reflected by several Mirrors one to another, where as long as it retains the similitude and agreement with the Object, it produces a Knowledge; but 'tis still every reflection, with a lessening of that perfect Clearness and Distinctness, which is in the first; till in many removes it has a great mixture of Dimness, and is not at first Sight so knowable, especially to weak Eyes. Thus it is with Knowledge, made out by a long train of Proofs.

§. 7. Now, in every step Reason makes in demonstrative Knowledge, there is an intuitive Knowledge of that Agreement or Disagreement it seeks with the next intermediate *Idea*, which it uses as a Proof: For if it were not

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so, that yet would need a Proof. Since without the Perception of such Agreement or Disagreement, there is no Knowledge produced: If it be perceived by it self, it is intuitive Knowledge: If it cannot be perceived by it self, there is need of some intervening *Idea*, as a common measure to shew their Agreement or Disagreement, by which it is plain, that every Step in Reasoning, that produces Knowledge, has intuitive Certainty; which when the Mind perceives, there is no more required, but to remember it to make the Agreement or Disagreement of the *Ideas*; concerning which we enquire visible and certain. So that to make any thing a Demonstration, it is necessary to perceive the immediate Agreement of the intervening *Ideas*, whereby the Agreement or Disagreement of the two *Ideas* under Examination (where the one is always the first, and the other the last in the Account) is found. This intuitive Perception of the Agreement or Disagreement of the intermediate *Ideas*, in each Step and Progression of the Demonstration, must also be carried exactly in the Mind, and a Man must be sure that no part is left out; which because in long Deductions, and the use of many Proofs, the Memory does not always so readily and exactly retain: therefore it comes to pass, that this is more imperfect than intuitive Knowledge, and Men embrace often Fallhoods for Demonstrations.

§. 8. The necessity of this intuitive Knowledge, in each step of scientific or demonstrative Reasoning, gave occasion, I imagine, to that *mistaken Axiom*, that all Reasoning was *ex præcognitis & præconcessis*; which how far it is a mistake, I shall have occasion to shew more at large, where I come to consider Propositions, and particularly those Propositions, which are called Maxims; and to shew that 'tis by a mistake, that they are supposed to be the foundations of all our Knowledge and Reasonings.

§. 9. It is not only Mathematicks, or the *Ideas alone of Number, Extension, and Figure*, that are capable of Demonstration, no more than it is these *Ideas* alone, and their Modes, that are capable of Intuition: For whatever *Ideas* we have, wherein the Mind can perceive the immediate Agreement or Disagreement that is between them, there the Mind is capable of intuitive Knowledge; and where it can perceive the Agreement or Disagreement of any two *Ideas*, by an intuitive Perception of the Agreement or Disagreement they have with any intermediate *Ideas*, there the Mind is capable of Demonstration, which is not limited to *Ideas* of Extension, or Figure, or Number, or their Modes.

§. 10. The Reason why it has been generally sought for, and supposed to be only in those, I imagine, has been not only the general usefulness of those Sciences: But because, in comparing their Equality or Excess, the Modes of Numbers have every the least difference very clear and perceivable: And though in Extension, every the least Excess is not so perceptible; yet the Mind has found out ways, to examine and discover demonstratively the just Equality of two Angles, or Extensions, or Figures, and both these, *i. e.* Numbers and Figures, can be set down, by visible and lasting marks.

§. 11. But in other simple *Ideas*, whose Modes and differences are made, and counted by degrees, and not quantity, we have not so nice and accurate a distinction of their differences, as to perceive, or find ways to measure their just Equality, or the least Differences. For those other simple *Ideas*, being Appearances or Sensations, produced in us by the Size, Figure, Number, and Motion of minute Corpuscles singly insensible, their different degrees also depend upon the variation of some, or all of those Causes; which since it cannot be observed by us in Particles of Matter, whereof

whereof each is too subtile to be perceived, it is impossible for us to have any exact Measures of the different degrees of these simple *Ideas*. For supposing the Sensation or *Idea* we name Whiteness, be produced in us by a certain number of Globules, which having a verticity about their own Centres, strike upon the *Retina* of the Eye, with a certain degree of Rotation, as well as progressive Swiftnes; it will hence easily follow, that the more the superficial parts of any Body are so ordered, as to reflect the greater number of Globules of Light, and to give them that proper Rotation, which is fit to produce this Sensation of White in us, the more White will that Body appear, that, from an equal space sends to the *Retina* the greater number of such Corpuscles, with that peculiar sort of Motion. I do not say, that the nature of Light consists in very small round Globules, nor of Whiteness, in such a texture of parts as gives a certain Rotation to these Globules, when it reflects them; for I am not now treating physically of Light, or Colours: But this, I think, I may say, that I cannot (and I would be glad any one would make intelligible that he did) conceive how Bodies without us, can any ways affect our Senses, but by the immediate contact of the sensible Bodies themselves, as in Tasting and Feeling, or the impulse of some insensible Particles coming from them, as in Seeing, Hearing, and Smelling; by the different impulse of which Parts, caused by their different Size, Figure, and Motion, the variety of Sensations is produced in us.

§. 12. Whether then they be Globules, or no; or whether they have a Verticity about their own Centres, that produce the *Idea* of Whiteness in us, this is certain, that the more Particles of Light are reflected from a Body, fitted to give them that peculiar Motion, which produces the Sensation of Whiteness in us; and possibly too, the quicker the peculiar Motion is, the whiter does the Body appear, from which the greater number are reflected, as is evident in the same piece of Paper put in the Sunbeams, in the Shade, and in a dark Hole; in each of which, it will produce in us the *Idea* of Whiteness in far different degrees.

§. 13. Not knowing therefore what number of Particles, not what Motion of them is fit to produce any precise degree of Whiteness, we cannot demonstrate the certain Equality of any two degrees of Whiteness, because we have no certain Standard to measure them by, nor Means to distinguish every the least real difference, the only help we have being from our Senses, which in this point fail us. But where the difference is so great, as to produce in the Mind clearly distinct *Ideas*, whose differences can be perfectly retained, there these *Ideas* of Colours, as we see in different kinds, as Blue and Red, are as capable of Demonstration, as *Ideas* of Number and Extension. What I have here said of Whiteness and Colours, I think, holds true in all secundaries Qualities and their Modes.

§. 14. These two, (*viz.*) Intuition and Demonstration, are the degrees of our Knowledge; whatever comes short of one of these, with what assurance soever embraced, is but Faith, or Opinion, but not Knowledge, at least in all general Truths. There is, indeed, another *Perception* of the Mind, employ'd about the particular existence of finite Beings without us; which going beyond bare probability, and yet not reaching perfectly to either of the fore-going degrees of Certainty, passes under the name of Knowledge. There can be nothing more certain, than that the *Idea* we receive from an external Object is in our Minds; this is intuitive Knowledge. But whether there be any thing more than barely that *Idea* in our Minds, whether we can thence certainly infer the existence of any thing without us, which corresponds to that *Idea*, is that whereof some Men think

there may be a Question made, because Men may have such *Ideas* in their Minds, when no such Thing exists, no such Object affects their Senses. But yet here, I think, we are provided with an Evidence, that puts us past doubting: For I ask any one, Whether he be not invincibly conscious to himself of a different Perception, when he looks on the Sun by day, and thinks on it by night; when he actually tastes Wormwood, or smells a Rose, or only thinks on that Savour, or Odour? We as plainly find the difference there is between any *Idea* revived in our Minds by our own Memory, and actually coming into our Minds by our Senses, as we do between any two distinct *Ideas*. If any one say, a Dream may do the same thing, and all these *Ideas* may be produced in us, without any external Objects, he may please to dream, that I make him this answer, 1. That 'tis no great matter, whether I remove his Scruple, or no: Where all is but dream, Reasoning and Arguments are of no use, Truth and Knowledge nothing. 2. That I believe he will allow a very manifest difference between dreaming of being in a Fire, and being actually in it. But yet if he be resolved to appear so sceptical, as to maintain, that what I call being actually in the Fire, is nothing but a dream; and that we cannot thereby certainly know, that any such thing as Fire actually exists without us; I answer, That we certainly find, that Pleasure or Pain follows upon the application of certain Objects to us, whose Existence we perceive, or dream that we perceive, by our Senses; this Certainty is as great as our Happiness, or Misery; beyond which, we have no concernment to know, or to be. So that, I think, we may add to the two former sorts of Knowledge, this also, of the existence of particular external Objects, by that perception and consciousness we have of the actual entrance of *Ideas* from them, and allow these *three degrees of Knowledge*, viz. *Intuitive, Demonstrative, and Sensitive*: in each of which, there are different degrees and ways of Evidence and Certainty.

§. 15. But since our Knowledge is founded on, and employ'd about only our *Ideas*, Will it not follow from thence, that it is conformable to our *Ideas*; and that where our *Ideas* are clear and distinct, or obscure and confused, our Knowledge will be so too? To which I answer, No: For our Knowledge consisting in the perception of the Agreement, or Disagreement of any two *Ideas*, its clearness or obscurity, consists in the clearness or obscurity of that Perception, and not in the clearness or obscurity of the *Ideas* themselves: v. g. a Man that has as clear *Ideas* of the Angles of a Triangle, and of Equality to two right ones, as any Mathematician in the World, may yet have but a very obscure Perception of their Agreement, and so have but a very obscure Knowledge of it. But obscure and confused *Ideas*, can never produce any clear or distinct Knowledge; because as far as any *Ideas* are confused, or obscure, so far the Mind can never perceive clearly, whether they agree, or disagree.

C H A P. III.

Of the Extent of Humane Knowledge.

§. 1. **K**nowledge, as has been said, lying in the Perception of the Agreement, or Disagreement, of any of our *Ideas*, it follows from hence, That,

First, We can have Knowledge no farther than we have Ideas.

§. 2. *Secondly, That we can have no Knowledge farther, than we can have Perception of that Agreement, or Disagreement:* Which Perception being, 1. Either by Intuition, or the immediate comparing any two *Ideas*; or, 2. By Reason, examining the Agreement, or Disagreement of two *Ideas*, by the intervention of some others: Or, 3. By Sensation, perceiving the Existence of particular Things. Hence it also follows,

§. 3. *Thirdly, That we cannot have an intuitive Knowledge, that shall extend it self to all our Ideas, and all that we would know about them;* because we cannot examine and perceive all the Relations they have one to another, by *juxta-position*, or an immediate comparison one with another. Thus having the *Ideas* of an Obtuse, and an acute angled Triangle, both drawn from equal Bases, and between Parallels, I can by intuitive Knowledge, perceive the one not to be the other; but cannot that way know, whether they be equal, or no; because their Agreement, or Disagreement in equality, can never be perceived by an immediate comparing them: The difference of Figure makes their parts incapable of an exact immediate application; and therefore there is need of some intervening Quantities to measure them by, which is Demonstration, or rational Knowledge.

§. 4. *Fourthly, It follows also, from what is above observed, that our rational Knowledge, cannot reach to the whole extent of our Ideas.* Because between two different *Ideas* we would examine, we cannot always find such *Mediums*, as we can connect one to another with an intuitive Knowledge, in all the parts of the Deduction; and where-ever that fails, we come short of Knowledge and Demonstration.

§. 5. *Fifthly, Sensitive Knowledge reaching no farther than the Existence of Things actually present to our Senses, is yet much narrower than either of the former.*

§. 6. From all which it is evident, that *the extent of our Knowledge comes not only short of the reality of Things, but even of the extent of our own Ideas.* Though our Knowledge be limited to our *Ideas*, and cannot exceed them either in extent, or perfection; and though these be very narrow bounds, in respect of the extent of All-being, and far short of what we may justly imagine to be in some, even created Understandings, not tied down to the dull and narrow Information, is to be received from some few, and not very acute ways of Perception, such as are our Senses; yet it would be well with us, if our Knowledge were but as large as our *Ideas*, and there were not many Doubts and Enquiries concerning the *Ideas* we have, whereof we are not, nor I believe ever shall be in this World, resolved. Nevertheless, I do not yet Question, but that Humane Knowledge, under the present Circumstances of our Beings and Constitutions, may be carried much farther than it hitherto has been, if Men would sincerely, and with freedom of Mind, employ all that Industry and labour of Thought, in improving the means of discovering Truth, which they do for the colouring or support of Falshood, to maintain a System,

System, Interest, or Party, they are once engaged in. But yet after all, I think I may, without injury to humane Perfection, be confident, that our Knowledge would never reach to all we might desire to know concerning those *Ideas* we have; nor be able to surmount all the Difficulties, and resolve all the Questions might arise concerning any of them. We have the *Ideas* of a *Square*, a *Circle*, and *Equality*; and yet, perhaps, shall never be able to find a *Circle* equal to a *Square*, and certainly know that it is so. We have the *Ideas* of *Matter* and *Thinking*, but possibly shall never be able to know, whether *Matter* thinks, or no; it being impossible for us, by the contemplation of our own *Ideas*, without revelation, to discover, whether Omnipotency has given to *Matter* fitly disposed, a power to perceive and think, or else joined and fixed to *Matter* so disposed, a thinking immaterial Substance: It being equally easy, in respect of our Notions, to conceive, that *GOD* can, if he pleases, superadd to our *Idea* of *Matter* a Faculty of *Thinking*, as that he should superadd to it another Substance, with a Faculty of *Thinking*; since we know not wherein *Thinking* consists, nor to what sort of Substances the Almighty has been pleased to give that power, which cannot be in any created Being, but meerly by the good Pleasure and Bounty of the Creator. For what assurance of Knowledge can any one have, that certain Thoughts, such as, *v.g.* Pleasure and Pain, should not be in *Body* it self, after a certain manner modified and moved, as well as that it should be in an immaterial Substance, upon the Motion of the parts of *Body*: Motion, according to the utmost reach of our *Ideas*, being able to produce nothing but Motion, so that when we allow it to produce Pleasure or Pain, or the *Idea* of a Colour, or Sound, we are fain to quit our Reason, go beyond our own *Ideas*, and attribute it wholly to the good Pleasure of our Maker. For since we must allow he has annexed Effects to Motion, which we can no way conceive Motion able to produce, what Reason have we to conclude, that he could not order them as well to be produced in a Subject we cannot conceive capable of them, as well as in a Subject we cannot conceive the motion of *Matter* can any way operate upon? I say not this, that I would any way lessen the belief of the Soul's Immateriality: I am not here speaking of Probability, but Knowledge; and I think not only, that it becomes the Modesty of Philosophy, not to pronounce Magisterially, where we want that Evidence that can produce Knowledge; but also, that it is of use to us, to discern how far our Knowledge does reach; for the state we are at present in, not being that of Vision, we must, in many Things, content our selves with Faith and Probability: And in the present Question, about the Immateriality of the Soul, if our Faculties cannot arrive at demonstrative Certainty, we need not think it strange. All the great Ends of Morality and Religion, are well enough secured, without philosophical Proofs of the Soul's Immateriality; since it is evident, that he who made us at first begin to subsist here, sensible intelligent Beings, and for several years continued us in such a state, can and will restore us to the like state of Sensibility in another World, and make us capable there to receive the Retribution he has designed to Men, according to their doings in this Life. But to return to the Argument in hand, our Knowledge, I say, is not only limited to the Paucity and Imperfections of the *Ideas* we have, and which we employ it about, but even comes short of that too: But how far it reaches, let us now enquire.

§7. The affirmations or negations we make concerning the *Ideas* we have, may, as I have before intimated in general, be reduced to these four sorts,

viz.

viz. Identity, Co-existence, Relation, and real Existence. I shall examine how far our Knowledge extends in each of these:

§. 8. *First, As to Identity and Diversity* in this way, of the Agreement, or Disagreement of our *Ideas*, *our intuitive Knowledge is as far extended as our Ideas themselves*: and there can be no *Idea* in the Mind, which it does not presently, by an intuitive Knowledge, perceive to be what it is, and to be different from any other.

§. 9. *Secondly, As to the second sort, which is the Agreement, or Disagreement of our Ideas in Co-existence*, in this *our Knowledge is very short*, though in this consists the greatest and most material part of our Knowledge concerning Substances. For our *Ideas* of the Species of Substances, being, as I have shewed, nothing but certain Collections of simple *Ideas* united in one Subject, and so co-existing together: *v. g.* Our *Idea* of Flame, is a Body hot, luminous, and moving upward; of Gold, a Body heavy to a certain degree, yellow, malleable, and fusible: for these, or some such complex *Ideas* as these in Mens Minds, do these two names of different Substances, *Flame* and *Gold*, stand for. When we would know any thing farther concerning these, or any other sort of Substances, what do we enquire but what other Qualities, or Powers, these Substances have, or have not; which is nothing else but to know, whether simple *Ideas* do, or do not co-exist with those that make up that complex *Idea*.

§. 10. This, how weighty and considerable a part soever of Humane Science, is yet very narrow, and scarce any at all. The reason whereof is, that the simple *Ideas* whereof our complex *Ideas* of Substances are made up, are, for the most part, such as carry with them, in their own Nature, *no visible necessary connexion*, or inconsistency with any other simple *Ideas*, whose co-existence with them, we would inform our selves about.

§. 11. The *Ideas* that our complex ones of Substances, are made up of, and about which our Knowledge, concerning Substances, is most employ'd, are those of their *secondary Qualities*; which depending all (as has been shewed) upon the primary Qualities of their minute and insensible parts; or if not upon them, upon something yet more remote from our Comprehension, *'tis impossible we should know, which have a necessary union or inconsistency one with another*: For not knowing the Root they spring from, not knowing what size, figure, and texture of Parts they are, on which depend, and from which result those Qualities which make our complex *Idea* of Gold, *'tis impossible we should know what other Qualities result from the same Constitution of the insensible parts of Gold*; and so consequently must always co-exist with that complex *Idea* we have of it, or else are inconsistent with it.

§. 12. Besides this Ignorance of the primary Qualities of the insensible Parts of Bodies, on which depend all their secondary Qualities, there is yet another and more incurable part of Ignorance, which sets us more remote from a certain Knowledge of the Co-existence, or Inco-existence (if I may so say) of different *Ideas* in the same Subject; and that is, that *there is no discoverable connexion between any secondary Quality, and those primary Qualities that it depends on*.

§. 13. That the size, figure, and motion of one Body, should cause a change in the size, figure, and motion of another Body, is not beyond our Conception; the separation of the parts of one Body, upon the intrusion of another; and the change from Rest to Motion upon impulse; these, and the like, seem to us to have some connexion one with another.

And

And if we knew these primary Qualities of Bodies, we might have reason to hope, we might be able to know a great deal more of these Operations of them one upon another: But our Minds not being able to discover any connexion betwixt these primary qualities of Bodies, and the sensations that are produced in us by them, we can never be able to establish certain and undoubted Rules, of the Consequence or Co-existence of any secondary Qualities, though we could discover the size, figure, or motion of those insensible Parts, which immediately produce them. We are so far from knowing what figure, size, or motion of parts produce a yellow Colour, a sweet Taste, or a sharp Sound, that we can by no means conceive how any size, figure, or motion of any Particles, can possibly produce in us the *Idea* of any Colour, Taste, or Sound whatsoever, there is no conceivable connexion betwixt the one and the other.

§. 14. In vain therefore shall we endeavour to discover by our *Ideas*, (the only true way of certain and universal Knowledge,) what other *Ideas* are to be found constantly joined with that of our complex *Idea* of any Substance; since we neither know the real Constitution of the minute Parts, on which their Qualities do depend; nor, did we know them, could we discover any necessary connexion between them; and any of the secondary Qualities; which is necessary to be done, before we can certainly know their necessary co-existence. So that let our complex *Idea* of any Species of Substances, be what it will, we can hardly, from the simple *Ideas* contained in it, certainly determine the necessary co-existence of any other Quality whatsoever. Our Knowledge in all these Enquiries, reaches very little farther than our Experience. Indeed, some few of the primary Qualities have a necessary dependence, and visible connexion one with another, as Figure necessarily supposes Extension, receiving or communicating Motion by impulse, supposes Solidity. But though these, and perhaps some others of our *Ideas* have; yet there are some few of them, that have a visible Connexion one with another, that we can by Intuition or Demonstration, discover the co-existence of very few of the Qualities are to be found united in Substances; and we are left only to the assistance of our Senses, to make known to us what Qualities they contain. For all the Qualities that are co-existent in any Subject, without this dependence and evident connexion of their *Ideas* one with another, we cannot know certainly to co-exist any farther, than Experience, by our Senses, informs us. Thus though we see the yellow Colour, and upon trial find the Weight, Malleableness, Fusibility, and Fixedness, that are united in a piece of Gold; yet because no one of these *Ideas* has any evident dependence, or necessary connexion with the other, we cannot certainly know, that where any four of these are, the fifth will be there also, how highly probable soever it may be: Because the highest Probability, amounts not to Certainty; without which, there can be no true Knowledge. For this co-existence can be no farther known, than it is perceived; and it cannot be perceived, but either in particular Subjects, by the observation of our Senses, or in general, by the necessary connexion of the *Ideas* themselves.

§. 15. As to incompatibility or repugnancy to co-existence, we may know, that any Subject can have of each sort of primary Qualities, but one particular at once, *v.g.* each particular Extension, Figure, number of Parts, Motion, excludes all other of each kind. The like also is certain of all sensible *Ideas* peculiar to each Sense; for whatever of each kind is present in any Subject, excludes all other of that sort; *v.g.* no one Subject can have two Smells, or two Colours, at the same time. To this, perhaps, will

will be said, Has not an Opall, or the infusion of *Lignum Nepriticum*, two Colours at the same time? To which, I answer, that these Bodies, to Eyes differently placed, may at the same time afford different Colours: But I take Liberty also to say, that to Eyes differently placed, 'tis different parts of the Object, that reflect the Particles of Light: And therefore 'tis not the same part of the Object, and so not the very same Subject, which at the same time appears both yellow and azure. For 'tis as impossible, that the very same Particle of any Body, should at the same time differently modify, or reflect the rays of Light, as that it should have two different Figures and Textures at the same time.

§. 16. But as to the Powers of Substances to change the sensible Qualities of other Bodies, which make a great part of our Enquiries about them, and is no inconsiderable branch of our Knowledge; I doubt, as to these; whether our Knowledge reaches much farther than our Experience; or whether we can come to the discovery of most of these Powers, and be certain that they are in any Subject by the Connexion with any of those Ideas, which to us make its Essence. Because the Active and Passive Powers of Bodies, and their ways of operating, consisting in a Texture and Motion of Parts, which we cannot by any means come to discover: 'Tis but in very few Cases, we can be able to perceive their dependence on, or repugnance to any of those Ideas, which make our complex one of that sort of Things. I have here instanced in the corpuscularian Hypothesis, as that which is thought to go farthest in an intelligible Explication of the Qualities of Bodies; and I fear the weakness of humane Understanding is scarce able to substitute another, which will afford us a fuller and clearer discovery of the necessary Connexion, and Co-existence, of the Powers, which are to be observed united in several sorts of them. This at least is certain, that which ever Hypothesis be clearest and truest, (for of that it is not my business to determine,) our Knowledge concerning corporeal Substances, will be very little advanced by any of them, till we are made see what Qualities and Powers of Bodies have a necessary Connexion or Repugnancy one with another; which in the present State of Philosophy, I think, we know but to a very small degree; And, I doubt, whether with those Faculties we have, we shall ever be able to carry our general Knowledge (I say not particular Experience) in this part much farther.

§. 17. If we are at this loss in respect of the Powers, and Operations of Bodies, I think it is easie to conclude, we are much more in the dark in reference to Spirits, whereof we naturally have no Ideas, but what we draw from that of our own; by reflecting on the Operations of our own Souls within us, as far as they can come within our Observation. But how inconsiderable a rank the Spirits that inhabit our Bodies hold amongst those various, and possibly innumerable, kinds of nobler Beings; and how far short they come of the Endowments and Perfections of Cherubims, and Seraphims, and infinite sorts of Spirits above us, we have in another Place made some Reflection upon.

§. 18. As to the third sort of our Knowledge, viz. the Agreement or Disagreement of any of our Ideas in any other Relation: This, as it is the largest Field of our Knowledge, so it is hard to determine how far it may extend: Because the Advances that are to be made in this part of Knowledge, depending on our Sagacity, in finding intermediate Ideas, that may shew the Relations and Habitades of Ideas, whose Co-existence is not considered, 'tis an hard Matter to tell, when we are at an end of such Discoveries; and when Reason has all the helps it is capable of, for the finding of Proofs, and examining the Agreement or Disagreement of remote Ideas. They

that are ignorant of *Algebra* cannot imagine the Wonders in this kind are to be done by it; and what farther Improvements and Helps, advantageous to other parts of Knowledge, the sagacious Mind of Man may yet find out, 'tis not easie to determine. This at least I believe, that the *Ideas* of Quantity are not those alone that are capable of Demonstration and Knowledge; and that other, and perhaps more useful parts of Contemplation, would afford us Certainty, if Vices, Passions, and domineering Interests did not oppose, or menace such Endeavours.

The *Idea* of a supreme Being, infinite in Power and Wisdom, whose Workmanship we are, and on whom we depend; and the *Idea* of our selves, as understanding, rational Creatures, being such as are clear in us, would, I suppose, if duly considered, and pursued, afford such Foundations of our Duty and Rules of Action, as might place *Morality* amongst the *Sciences* capable of Demonstration; wherein I doubt not, but from Principles, as incontestable as those of the *Mathematicks*, by necessary Consequences, the measures of right and wrong might be made out, to any one that will apply himself with the same Indifferency and Attention to the one, as he does to the other of these Sciences. The Relation of other Modes may certainly be perceived, as well as those of Number and Extension; and I cannot see why they should not also be capable of Demonstration, if due Methods were thought on to examine, or pursue their Agreement or Disagreement. *Where there is no Propriety, there is no Injustice*, is a Proposition as certain as any Demonstration in *Euclid*: For the *Idea* of Property, being a right to any thing; and the *Idea* to which the name Injustice is given, being the Invasion or Violation of that right; it is evident, that these *Ideas* being thus established, and these names annexed to them, I can as certainly know this Proposition to be true, as that a Triangle has three Angles equal to two right ones. Again, *No Government allows absolute Liberty*, the *Idea* of Government being the establishment of Society upon certain Rules or Laws, which require Conformity to them; and the *Idea* of absolute Liberty, being for any one to do whatever he pleases; I am as capable of being certain of the Truth of this Proposition, as of any in *Mathematicks*.

§. 19. That which in this respect has given the advantage to the *Ideas* of Quantity, and made them thought more capable of Certainty and Demonstration, is,

First, That they can be set down, and represented by sensible marks, which have a greater and nearer Correspondence with them than any Words or Sounds whatsoever. Diagrams drawn on Paper are Copies of the *Ideas* in the Mind, and not liable to the Uncertainty that Words carry in their Signification: An Angle, Circle, or Square, drawn in Lines, lies open to the view, and cannot be mistaken: it remains unchangeably, and may at leisure be considered, and examined; and the Demonstration be revised, and all the parts of it may be gone over more than once, without any danger of the least change in the *Ideas*. This cannot be thus done in moral *Ideas*, we have no sensible marks that resemble them, whereby we can set them down; we have nothing but Words to express them by; which though, when written, they remain the same, yet the *Ideas* they stand for, may change in the same Man; and 'tis very seldom, that they are not different in different Persons.

Secondly, Another thing that makes the greater difficulty in *Ethicks*, is, That moral *Ideas* are commonly more complex than those of the Figures ordinarily considered in *Mathematicks*: from whence these two Inconveniences follow: *First*, That their names are of more uncertain Signification,

nification, the precise Collection of simple *Ideas* they stand for not being so easily agreed on, and so the Sign that is used for them in Communication, always, and in Thinking, often, does not always carry with it the same *Idea*. Upon which the same Disorder, Confusion, and Error follows, as would if a Man, going to demonstrate something of an Heptagon, should in the Diagram he took to do it, leave out one of the Angles, and by oversight make the Figure with one Angle less than the name ordinarily imported, or he intended it should, when at first he thought of his Demonstration. This often happens, and is hardly avoidable in very complex moral *Ideas*, where the same name being retained, one Angle, *i. e.* one simple *Idea* is left out or put in, in the complex one, (still called by the same name,) more at one time than another. Secondly, From the Complexedness of these moral *Ideas* there follows another Inconvenience, (*viz.*) that the Mind cannot easily retain those precise Combinations, so exactly and perfectly, as is necessary in the Examination of the Habitues and Correspondencies, Agreements or Disagreements, of several of them one with another; especially where it is to be judged of by long Deductions, and the Intervention of several other complex *Ideas*, to shew the Agreement, or Disagreement of two remote ones.

The great help against this, which Mathematicians find in Diagrams and Figures, which remain unalterable in their Draughts, is very apparent, and the memory would often have great difficulty otherwise to retain them so exactly, whilst the Mind went over the parts of them, step by step, to examine their several Correspondencies: And though in casting up a long Summ, either in Addition, Multiplication, or Division, every part be only a Progression of the Mind, taking a view of its own *Ideas*, and considering their Agreement or Disagreement, and the Resolution of the Question be nothing but the Result of the whole, made up of such particulars, whereof the Mind has a clear Perception; yet without setting down the several Parts by marks, whose precise Significations are known, and by marks, that last and remain in view, when the memory had let them go; it would be almost impossible to carry so many different *Ideas* in Mind, without confounding, or letting slip some parts of the Reckoning, and thereby making all our Reasonings about it useless. In which Case, the Cyphers or Marks help not the Mind at all to perceive the Agreement of any two, or more Numbers, their Equalities or Proportions. That the Mind has only by Intuition of its own *Ideas* of the Numbers themselves. But the numerical Characters are helps to the memory, to record and retain the several *Ideas* about which the Demonstration is made, whereby a man may know how far his intuitive Knowledge, in surveying several of the particulars, has proceeded; that so he may without Confusion go on to what is yet unknown; and, at last, have in one view before him the Result of all his Perceptions and Reasonings.

§. 20 One part of these *Disadvantages*, in moral *Ideas*, which has made them be thought not capable of Demonstration, may in a good measure be remedied by Definitions, setting down that Collection of simple *Ideas*, which every Term shall stand for; and then using the Terms steadily and constantly for that precise Collection. And what methods *Algebra*, or something of that kind, may hereafter suggest, to remove the other difficulties, is not easie to foretell. Confident I am, that if Men would in the same method, and with the same indifferency, search after moral, as they do mathematical Truths, they would find them to have a stronger Connexion one with another, and a more necessary Consequence from our clear and distinct *Ideas*, and to come nearer perfect Demonstration, than

is commonly imagined. But much of this is not to be expected, whilst the desire of Esteem, Riches, or Power, makes Men espouse the well endowed Opinions in Fashion, and then seek Arguments, either to make good their Beauty, or varnish over, and cover their Deformity: nothing being so beautiful to the Eye, as Truth is to the Mind; nothing so deformed and irreconcilable to the Understanding, as a Lye. For though many a Man can with satisfaction enough own a no very handsome Wife in his Bosom; yet who is bold enough openly to avow that he has espoused a Falshood, and received into his Breast so ugly a thing as a Lye? Whilst the Parties of Men, I say, cram their Tenents down all Men's Throats, whom they can get into their Power, without permitting them to examine their Truth or Falshood; and will not let Truth have fair Play in the World, nor Men the Liberty to search after it; What Improvements can be expected of this kind? What greater Light can be hoped for in the moral Sciences? The Subject part of Mankind, in most Places, might, instead thereof, with *Egyptian Bondage* expect *Egyptian Darknes*, were not the Candle of the Lord set up by himself in Men's Minds, which it is impossible for the Breath or Power of Man wholly to extinguish.

§. 21. As to the fourth sort of our Knowledge, *viz. of the real, actual Existence* of Things without us, we have an intuitive Knowledge of our own Existence; a demonstrative Knowledge of the Existence of a God; of the Existence of any thing else, we have no other but a sensitive Knowledge, which extends not beyond the Objects present to our Senses.

§. 22. Our Knowledge being so narrow, as I have shew'd, it will, perhaps, give us some Light into the present State of our Minds, if we look a little into the dark side, and take a view of *our Ignorance*; which being *infinitely larger than our Knowledge*, may serve much to the quieting of Disputes, and Improvement of useful Knowledge; if discovering how far we have clear and distinct *Ideas*, we confine our Thoughts within the Contemplation of those Things that are within the reach of our Understandings, and lanch not out into that Abyss of Darknes, (where we have not Eyes to see, nor Faculties to perceive any thing,) out of a Presumption that nothing is beyond our Comprehension. But to be satisfied of the Folly of such a Conceit, we need not go far. He that knows any thing, knows this in the first place, that he need not seek long for Instances of his Ignorance. The meanest, and most obvious Things that come in our way, have dark sides, that the quickest Sight cannot penetrate into. The clearest, and most enlarged Understandings of thinking Men, find themselves puzzled, and at a loss, in every Particle of Matter; which we shall the less wonder at, when we consider the *Causes of our Ignorance*; which from what has been said, I suppose, will be found to be chiefly these three:

First, Want of *Ideas*.

Secondly, Want of a discoverable Connexion between the *Ideas* we have.

Thirdly, Want of tracing, and examining our *Ideas*.

§. 23. *First*, There are some Things, and those not a few, that we are ignorant of for want of *Ideas*.

First, all the simple *Ideas* we have are confined (as I have shewn) to the Observation of our Senses, and the Operations of our own Minds, that we are conscious of in our selves. But how much these few and narrow Inlets are disproportionate to the vast whole Extent of all Beings, will not be hard to persuade those, who are not so foolish, as to think their span the measure of all Things. What other simple *Ideas* 'tis possible the Creatures in other parts of the Universe,

verse may have, by the Assistance of Senses and Faculties, more or perfecter than we have, or different from ours, 'tis not for us to determine. But to say, or think there are no such, because we conceive nothing of them, is no better an Argument, than if a blind Man should be positive in it, that there was no such thing as Sight and Colours, because he had no manner of *Idea* of any such thing, nor could by any means frame to himself any Notions about Seeing. The Ignorance, and Darkness that is in us, no more hinders nor confines the Knowledge that is in others, than the Blindness of a Mole is an Argument against the quick sightedness of an Eagle. He that will consider the infinite Power, Wisdom, and Goodness of the Creator of all Things, will find Reason to think it was not all laid out upon so inconsiderable, mean, and impotent a Creature, as he will find Man to be; who in all probability, is one of the lowest of all intellectual Beings. What Faculties therefore other Species of Creatures have to penetrate into the Nature, and inmost Constitutions of Things; what *Ideas* they may receive of them, far different from ours, we know not. This we know, and certainly find, that we want several other views of them, besides those we have, to make Discoveries of them more perfect. And we may be convinced that the *Ideas* we can attain to by our Faculties, are very disproportionate to Things themselves, when a positive clear distinct one of Substance it self, which is the Foundation of all the rest, is concealed from us. But want of *Ideas* of this kind, being a Part, as well as Cause of our Ignorance, cannot be described. Only this, I think, I may confidently say of it, That the intellectual and sensible World, are in this perfectly alike; That that part which we see of either of them holds no proportion with what we see not; And whatsoever we can reach with our Eyes, or our Thoughts of either of them, is but a point, almost nothing, in comparison of the rest.

§. 24. *Secondly*, Another great Cause of Ignorance, is the want of *Ideas* we are capable of. As the want of *Ideas*, which our Faculties are not able to give us, shuts us wholly from those views of Things, which 'tis reasonable to think, other perfecter Beings than we have, of which we know nothing; so the want of *Ideas*, I now speak of, keeps us in Ignorance of Things, we conceive capable of being known to us. Bulk, Figure, and Motion, we have *Ideas* of. But though we are not without *Ideas* of these primary Qualities of Bodies in general; yet not knowing what is the particular Bulk, Figure, and Motion, of the greatest part of the Bodies of the Universe, we are ignorant of the several Powers, Efficacies, and Ways of Operation, whereby the Effects we daily see, are produced. These are *hid from us in some Things, by being too remote; and in others, by being too minute*. When we consider the vast distance of the known and visible parts of the World, and the Reasons we have to think, that what lies within our Ken, is but a small part of the immense Universe, we shall then discover an huge Abyfs of Ignorance. What are the particular Fabricks of the great Masses of Matter, which make up the whole stupendious frame of corporeal Beings; how far they are extended; what is their Motion, and how continued, or communicated; and what Influence they have one upon another, are Contemplations, that at first glimpse our Thoughts lose themselves in. If we narrow our Contemplation, and confine our Thoughts to this little Canton, I mean this System of our Sun, and the grosser Masses of Matter, that visibly move about it, what several sorts of Vegetables, Animals, and intellectual corporeal Beings, infinitely different from those of our little spot of Earth, may probably be in the other Planets; to the Knowledge of which, even of their outward

Figures

Figures and Parts, we can no way attain, whilst we are confined to this Earth, there being no natural Means, either by Sensation or Reflection, to convey their certain *Ideas* into our Minds. They are out of the reach of those Inlets of all our Knowledge; and what sorts of Furniture and Inhabitants those Mansions contain in them, we cannot so much as guess, much less have clear, and distinct *Ideas* of them.

§. 25. If a great, nay for the greatest, part of the several ranks of *Bodies* in the Universe, escape our notice by their remoteness, there are others that are no less *concealed from us by their minuteness*. These insensible Corpuscles, being the active parts of Matter, and the great Instruments of Nature, on which depend not only all their secondary Qualities, but also most of their natural Operations; our want of precise distinct *Ideas* of their primary Qualities, keeps us in an incurable Ignorance of what we desire to know about them. I doubt not but if we could discover the Figure, Size, Connexion, and Motion of the minute constituent parts of any two Bodies, we should know without Trial several of their Operations one upon another, as we do now the Properties of a Square, or a Triangle; and we should be able to tell before Hand, that Rubarb would purge, Hemlock kill, and Opium make a Man sleep; as well as a Watch-maker does that a little piece of Paper, laid on the Ballance, will keep the Watch from going till it be removed; or that some small part of it, being rubb'd by a File, the Machin would quite lose its Motion, and the Watch go no more. Did we know the mechanical Affections of the Particles of Rubarb, Hemlock, Opium, and a Man, as a Watch-maker does those of a Watch, whereby it performs all its Operations; and of a File, which by rubbing on them will alter the Figure of any of the Wheels; the dissolving of Silver in *aqua fortis*, and Gold in *aq. regia*, and not *vice versa*, would be then, perhaps, no more difficult to know, than it is to a Smith to understand why the turning of one Key will open a Lock, and not the turning of another. But whilst we are destitute of Senses, acute enough to discover the minute Particles of Bodies, and to give us *Ideas* of their mechanical Affections, we must be content to be ignorant of their properties and ways of Operation; nor can we be assured about them any farther, than some few Trials we make, are able to reach. But whether they will succeed again another time, we cannot be certain. This hinders our certain Knowledge of universal Truths, concerning natural Bodies. And our Reason carries us herein very little beyond particular matter of Fact.

§. 26. And therefore I am apt to doubt that, how far soever humane Industry may advance useful and experimental Philosophy in *physical Things*, scientificall will still be out of our reach; because we want perfect and adequate *Ideas* of those very Bodies, which are nearest to us, and most under our Command. Those which we have ranked into Classes under names, and we think our selves best acquainted with, we have but very imperfect, and incomplete *Ideas* of. Distinct *Ideas* of the several sorts of Bodies, that fall under the Examination of our Senses, perhaps, we may have; but adequate *Ideas*, I suspect, we have not of any one amongst them. And though the former of these will serve us for common Use and Discourse; yet whilst we want the latter, we are not capable of *scientificall Knowledge*; nor shall ever be able to discover general, instructive Truths concerning them. Certainty and Demonstration, are Things we must not, in these Matters, pretend to. By the Colour, Figure, Taste, and Smell, and other sensible Qualities, we have as clear, and distinct *Ideas* of Sage and Hemlock, as we have of a Circle and a Triangle: But having no *Ideas* of

of the particular primary Qualities of the minute parts of either of these Plants, nor of other Bodies we would apply them to, we cannot tell what effects they will produce; Nor when we see those Effects, can we so much as guess, much less know, their manner of production. Thus having no *Ideas* of the particular mechanical Affections of the minute parts of Bodies, that are within our view and reach, we are ignorant of their Constitutions, Powers, and Operations; and of Bodies more remote, we are ignorant of their very outward Shapes and Beings.

§. 27. This, at first sight, will shew us how disproportionate our Knowledge is to the whole extent even of material Beings; to which, if we add the Consideration of that infinite number of Spirits that may be, and probably are, which are yet *more remote from our Knowledge*, whereof we have no cognizance, nor can frame to our selves any distinct *Ideas* of their several ranks and sorts, we shall find this cause of Ignorance conceal from us, in an impenetrable obscurity, almost the whole intellectual World; a greater, certainly, and more beautiful World than the material. For, bating some very few, and those, if I may so call them, superficial *Ideas*, which Spirit, we, by reflection, get of our own and of the Father of all Spirits, the eternal, independent Author of them and us, and all Things, we have no certain information, so much as of their Existence, but by revelation. Angels of all sorts are naturally beyond our discovery. And all those Intelligences, whereof 'tis likely there are more Orders than of corporeal Substances, are Things whereof our natural Faculties give us no certain account at all. That there are Minds, and thinking Beings, in other Men as well as himself, every Man has a reason, from their Words and Actions, to be satisfied. But between us and the Great GOD, we can have no certain knowledge of the Existence of any Spirits, but by revelation; much less have we distinct *Ideas* of their different Natures, Conditions, States, Powers, and several Constitutions, wherein they agree or differ from one another, and from us. And therefore in what concerns their different Species and Properties, we are under an absolute ignorance.

§. 28. *Secondly*, What a small part of the substantial Beings that are in the Universe, the want of *Ideas* leave open to our Knowledge, we have seen. In the next place, another cause of Ignorance, of no less moment, is the want of a discoverable Connexion between those *Ideas* we have. For wherever we want that, we are utterly incapable of universal and certain Knowledge; and are, as in the former case, left only to Observation and Experiment; which how narrow and confined it is, how far from general Knowledge, we need not be told. I shall give some few instances of this cause of our Ignorance, and so leave it. 'Tis evident that the bulk, figure, and motion of several Bodies about us, produce in us several Sensations as of Colours, Sounds, Tastes, or Smells, Pleasure and Pain, &c. those mechanical Affections of Bodies, having no affinity at all with these *Ideas* they produce in us, there being no conceivable connexion between any impulse of any sort of Body, and any perception of a Colour, or Smell, we find in our Minds, we can have no distinct knowledge of such Operations beyond our Experience; and can reason no otherwise about them, than as the effects or appointment of an infinitely Wise Agent, which perfectly surpasses our Comprehensions. As the *Ideas* of sensible, secondary Qualities we have in our Minds, can, by us, be no way deduced from bodily Causes, nor any correspondence or connexion be found between them and those primary Qualities which (Experience shews us) produce them in us; so, on the other side, the Operations of our Minds upon our Bodies, is as unconceivable. How any

any thought should produce a motion in Body is as remote from the nature of our *Ideas*, as how any Body should produce any Thought in the Mind. That it is so, if Experience did not convince us, the Considerations of the Things themselves would never be able, in the least, to discover to us. These, and the like, though they have a constant and regular connexion, in the ordinary course of Things; yet that connexion being not discoverable in the *Ideas* themselves, which appearing to have no necessary dependence one on another, we can attribute their connexion to nothing else but the arbitrary Determination of that All-wise Agent, who has made them to be, and to operate as they do, in a way utterly above our weak Understanding to conceive.

§. 29. In some of our *Ideas* there are certain Relations, Habitues, and Connexions, so visibly included in the Nature of the *Ideas* themselves, that we cannot conceive them separable from them, by any Power whatsoever. And in these only, we are capable of certain and universal Knowledge. Thus the *Idea* of a right-lined Triangle necessarily carries with it an equality of its Angles to two right ones. Nor can we conceive this Relation, this connexion of these two *Ideas*, to be possibly mutable, or depend on any arbitrary Power, which of choice made it thus, or could make it otherwise. But the coherence and continuity of the parts of Matter, the production of Sensation in us of Colours and Sounds, &c. by impulse and motion; nay, the original Rules and Communication of Motion, being such wherein we can discover no natural connexion with any *Ideas* we have, we cannot but ascribe them to the arbitrary Will and good Pleasure of the Wise Architect. I need not, I think, here mention the Resurrection of our Bodies, the future state of this Globe of Earth, and such other Things, which are by every one acknowledged to depend wholly on the Determination of a free Agent. The Things that, as far as our Observation reaches, we constantly find to proceed regularly, we may conclude, do act by a Law set them; but yet a Law that we know not; whereby, though Causes work steadily and Effects constantly flow from them; yet their Connexions and Dependencies being not discoverable in our *Ideas*, we can have but an experimental Knowledge of them. From all which, 'tis easie to perceive what a darkness we are involved in, how little 'tis of being, and the things that are, that we are capable to know. And therefore we shall do no injury to our Knowledge, when we modestly think with our selves, that we are so far from being able to comprehend the whole nature of the Universe, and all the things contained in it, that we are not capable of a philosophical Knowledge of the Bodies that are about us, and make a part of us: Concerning their secondary Qualities, Powers, and Operations, we can have no universal certainty. Several Effects come every day within the notice of our Senses, of which we have so far sensitive Knowledge; but the causes, manner, and certainty of their production, for the two foregoing Reasons, we must be content to be ignorant of. In these we can go no farther than particular Experience informs us of matter of fact, and by Analogy to guess what Effects the like Bodies are, upon other tryals, like to produce. But as to a perfect Science of natural Bodies, (not to mention spiritual Beings,) we are, I think, so far from being capable of any such thing, that I conclude it lost labour to seek after it.

§. 30. Thirdly, Where we have adequate *Ideas*, and where there is a certain and discoverable connexion between them, yet we are often ignorant, for want of tracing those *Ideas* we have, or may have, and finding out those intermediate *Ideas*, which may shew us what habitude of agree-

agreement or disagreement they have one with another. And thus many are ignorant of mathematical Truths, not out of any imperfection of their Faculties, or uncertainty in the Things themselves; but for want of application in acquiring, examining, and by due ways comparing those *Ideas*. That which has most contributed to hinder the due tracing of our *Ideas*, and finding out their Relations, and Agreements or Disagreements one with another, has been, I suppose, the ill use of Words. It is impossible that Men should ever truly seek, or certainly discover the Agreement or Disagreement of *Ideas* themselves, whilst their Thoughts flutter about, or stick only in Sounds of doubtful and uncertain significations. Mathematicians abstracting their Thoughts from Names, and accustoming themselves to set before their Minds the *Ideas* themselves, that they would consider, and not Sounds instead of them, have avoided thereby a great part of that perplexity, puddering, and confusion, which has so much hindered Mens progress in other parts of Knowledge; who sticking in Words of undetermined and uncertain signification, were unable to distinguish True from False, Certain from Probable, Consistent from Inconsistent, in their own Opinions: Whereby the increase brought into the Stock of real Knowledge has been very little, in proportion to the Schools, Disputes, and Writings, the World has been fill'd with; whilst Men, being lost in the great Wood of Words, knew not whereabouts they were, how far their Discoveries were advanced, or what was wanting in their own, or the general Stock of Knowledge. Had Men, in their discoveries of the material, done, as they have in those of the intellectual World, involved all in the obscurity of uncertain and doubtful terms and ways of talking, Volumes writ of Navigation and Voyages, Theories and Stories of Zones and Tydes multiplied and disputed; nay, Ships built, and Fleets set out, would never have taught us the way beyond the Line; and the Antipodes would be still as much unknown, as when it was declared Heresie to hold there were any. But having spoken sufficiently of Words, and the ill or careless use, that is commonly made of them, I shall not say any thing more of it here.

§. 31. Hitherto we have examined the extent of *our Knowledge*, in respect of the several sorts of Beings that are. There is another *extent of it, in respect of Universality*; which will also deserve to be considered: and in this regard, *our Knowledge* follows the Nature of our *Ideas*. If the *Ideas* are abstract, whose agreement or disagreement we perceive, our Knowledge is universal. For what is known of such general *Ideas*, will be true of every particular thing, in whom that Essence, *i. e.* that abstract *Idea* is to be found; and what is once known of such *Ideas*, will be perpetually, and for ever true. So that as to all general Knowledge, we must search and find it only in our own Minds, and 'tis only the examining of our own *Ideas*, that furnisheth us with that. Truths belonging to Essences of Things, (that is, to abstract *Ideas*) are eternal, and are to be found out by the contemplation only of those Essences; as the Existence of Things is to be known only from Experience. But having more to of this in the Chapters, where I shall speak of general and real Knowledge, this may here suffice as to the Universality of our Knowledge in general.

C H A P. IV.

Of the Reality of our Knowledge.

§. 1. I doubt not but my Reader, by this time, may be apt to think, that I have been all this while only building a Castle in the Air; and be ready to say to me, To what purpose all this stir? Knowledge, say you, is only the perception of the agreement or disagreement of our own *Ideas*; but who knows what those *Ideas* may be? Is there any thing so extravagant, as the Imaginations of Men's Brains? Where is the Head that has no *Chimeras* in it? Or if there be a sober and a wise Man, what difference will there be, by your Rules, between his Knowledge, and that of the most extravagant Fancy in the World? They both have their *Ideas*, and perceive their agreement and disagreement one with another. If there be any difference between them, the advantage will be on the warm-headed Man's side, as having the more *Ideas*, and the more lively. And so, by your Rules, he will be the more knowing. If it be true, that all Knowledge lies only in the perception of the agreement or disagreement of our own *Ideas*, the Visions of an Enthusiast, and the Reasonings of a sober Man, will be equally certain. 'Tis no matter how Things are: so a Man observe but the agreement of his own Imaginations, and talk conformably; it is all Truth, all Certainty. Such Castles in the Air, will be as strong Holds of Truth, as the Demonstrations of *Euclid*. That an Harpy is not a Centaur, is by this way as certain knowledge, and as much a Truth, as that a Square is not a Circle.

But of what use is all this fine Knowledge of Men's own Imaginations, to a Man that enquires after the reality of Things? It matters not what Men's Fancies are, 'tis the Knowledge of Things that is only to be prized: 'tis this alone gives a value to our Reasonings, and preference to one Man's Knowledge over another's, that it is of Things as they really are, and not of Dreams and Fancies.

§. 2. To which I answer, That if our Knowledge of our *Ideas* terminate in them, and reach no farther, where there is something farther intended, our most serious Thoughts would be of little more use, than the Reveries of a crazie brain; and the Truths built thereon of no more weight, than the Discourses of a Man, who sees Things clearly in a Dream, and with great assurance utters them. But, I hope, before I have done, to make it evident, that this way of certainty, by the knowledge of our own *Ideas*, goes a little farther than bare Imagination; and, I believe, it will appear, that all the certainty of general Truths a Man has, lies in nothing else.

§. 3. 'Tis evident, the Mind knows not Things immediately, but only by the intervention of the *Ideas* it has of them. Our Knowledge therefore is real, only so far as there is a conformity between our *Ideas* and the reality of Things. But what shall be here the Criterion? How shall the Mind, when it perceives nothing but its own *Ideas*, know that they agree with Things themselves? This, though it seem not to want difficulty, yet, I think, there be two sorts of *Ideas* that, we may be assured, agree with Things.

§. 4. First, The first are simple *Ideas*, which since the Mind, as has been shewed, can by no means make to it self, must necessarily be the product of Things operating on the Mind in a natural way, and producing

cing therein those Perceptions, which by the Wisdom and Will of our Maker, they are ordained and adapted to. From whence it follows, that *simple Ideas are not fictions* of our Fancies, but the natural and regular productions of Things without us, really operating upon us; and so carry with them all the conformity our state requires, which is to represent Things under those appearances they are fitted to produce in us; whereby we may distinguish the Substances they are in, and apply them to our Uses. Thus the *Idea* of Whiteness, or Bitterness, as it is in the Mind, exactly answering that Power which is in any Body to produce it there, has all the real conformity it can, or ought to have, with Things without us. And this conformity between our *simple Ideas*; and the existence of Things, is sufficient for real Knowledge.

§. 5. *Secondly, All our complex Ideas, except those of Substances*, being Archetypes of the Mind's own making, not intended to be the Copies of any thing, nor referred to the existence of any thing, as to their Originals, cannot want any conformity necessary to real Knowledge. For that which is not designed to represent any thing but it self, can never be capable of a wrong representation, nor mislead us from the true apprehension of any thing, by its dissimilarity to it; and such, excepting those of Substances, are all our complex *Ideas*; which, as I have shewed in another place, are Combinations of *Ideas*, which the Mind, by its free choice, puts together, without considering any connexion they have in Nature. And hence it is, that in all these sorts the *Ideas* themselves are considered as the Archetypes, and Things no otherwise regarded, but as they are conformable to them. So that we cannot but be infallibly certain, that all the Knowledge we attain concerning these *Ideas* is real, and reaches Things themselves: Because in all our Thoughts, Reasonings, and Discourses of this kind, we intend Things no farther than as they are conformable to our *Ideas*; so that in these, we cannot miss of a certain undoubted reality.

§. 6. I doubt not but it will be easily granted, that the *Knowledge* we may have of *mathematical Truths*, is not only certain, but *real Knowledge*; not idle *Chimeras* of Men's Brains: And yet if we will consider, we shall find, that it is only of our own *Ideas*. The Mathematician considers the Truth and Properties belonging to a Rectangle, or Circle, only as they are in *Idea* in his own Mind; for 'tis possible he never found either of them existing mathematically, *i.e.* precisely true, in his Life: But yet the knowledge he has of any Truths or Properties belonging to a Circle, or any other mathematical Figure, are nevertheless true and certain, even of real Things existing: because real Things are no farther concerned, nor intended to be meant by any such Propositions, than as Things really agree to those Archetypes in his Mind. Is it true of the *Idea* of a Triangle, that its three Angles are equal to two right ones? It is true also of a Triangle, where-ever it really exists. What ever other Figure exists, that is not exactly answerable to that *Idea* of a Triangle in his Mind, is not at all concerned in that Proposition. And therefore he is certain all his Knowledge concerning such *Ideas*, is real Knowledge: because intending Things no farther than they agree with those his *Ideas*, he is sure what he knows concerning those Figures, when they have barely an *Ideal existence* in his Mind, will hold true of them also, when they have a real existence in Matter; his consideration being barely of those Figures, which are the same where-ever or however they exist.

§. 7. And hence it follows, that *moral Knowledge* is as capable of real Certainty, as Mathematicks. For Certainty being but the Perception of the Agreement, or Disagreement of our *Ideas*; and Demonstration nothing but the Perception of such Agreement, by the Intervention of other *Ideas*, or Mediums, our moral *Ideas*, as well as mathematical, being Archetypes themselves, and so adequate, and compleat *Ideas*, all the Agreement, or Disagreement we shall find in them, will produce real Knowledge, as well as in mathematical Figures.

§. 8. That which is requisite to make our Knowledge certain, is the Clearness of our *Ideas*; and that which is required to make it real, is, that they answer their Archetypes. Nor let it be wondred, that I place the Certainty of our Knowledge in the Consideration of our *Ideas*, with so little Care and Regard (as it may seem) to the real Existence of Things: Since most of those Discourses, which take up the Thoughts, and engage the Disputes of those who pretend to make it their Business to enquire after Truth and Certainty, will, I presume, upon Examination be found to be general Propositions, and Notions in which Existence is not at all concerned. All the Discourses of the Mathematicians about the Squaring of a Circle, conick Sections, or any other part of Mathematicks, concern not the Existence of any of those Figures; but their Demonstrations which depend on their *Ideas* are the same, whether there be any square or Circle existing in the World, or no. In the same manner, the Truth and Certainty of moral Discourses abstracts from the Lives of Men, and the Existence of those Vertues in the World, whereof they treat: Nor is Tully's Offices less true, because there is no Body in the World that exactly practices his Rules, and lives up to that pattern of a vertuous Man, which he has given us, and which existed no where when he writ but in *Idea*. If it be true in Speculation, *i. e.* in *Idea*, that Murther deserves Death, it will also be true in Reality of any Action that exists conformable to that *Idea* of Murther. As for other Actions, the Truth of that Proposition concerns them not. And thus it is of all other Species of Things, which have no other Essences but those *Ideas* which are in the Minds of Men.

§. 9. But it will here be said, that if moral Knowledge be placed in the Contemplation of our own moral *Ideas*, and those, as other Modes, be of our own making, What strange Notions will there be of *Justice* and *Temperance*? What confusion of Vertues and Vices, if every one may make what *Ideas* of them he pleases? No confusion nor disorder in the Things themselves, nor the Reasonings about them; no more than (in Mathematicks) there would be a disturbance in the Demonstration, or a change in the Properties of Figures, and their Relations one to another, if a Man should make a Triangle with four Corners, or a Trapezium with four right Angles: that is, in plain English, change the Names of the Figures, and call that by one Name, which Mathematicians call'd ordinarily by another. For let a Man make to himself the *Idea* of a Figure with three Angles, whereof one is a right one, and call it, if he please, *Equilaterum* or *Trapezium*, or any thing else, the Properties of, and Demonstrations about that *Idea*, will be the same, as if he call'd it a Rectangular-Triangle. I confess, the change of the Name, by the impropriety of Speech, will at first disturb him, who knows not what *Idea* it stands for; but as soon as the Figure is drawn, the Consequences and Demonstration are plain and clear. And just the same is it in moral Knowledge, let a Man have the *Idea* of taking from others, without their Consent, what their honest Industry has possessed them of, and call this *Justice*, if he please. He that takes the Name here without the *Idea* put to it, will be mistaken,

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by joining another *Idea* of his own to that Name: But strip the *Idea* of that Name, or take it such as it is in the Speaker's Mind, and the same Things will agree to it, as if you call'd it Injustice. Indeed, wrong Names in moral Discourses, breed usually more disorder, because they are not so easily rectified, as in Mathematicks, where the Figure once drawn and seen, makes the Name useless, and of no force: For what need of a Sign, when the Thing signified is present and in view? But in moral Names, that cannot be so easily and shortly done, because of the many decompositions that go to the making up the complex *Ideas* of those Modes. But yet for all this the *miscalling* of any of those *Ideas*, contrary to the usual signification of the Words of that Language, *hinders not* but we may have *certain and demonstrative Knowledge* of their several Agreements and Disagreements, if we will carefully, as in Mathematicks, keep to the same precise *Ideas*, and trace them in their several Relations one to another, without being led away by their Names. If we but separate the *Idea* under consideration, from the Sign that stands for it, our Knowledge goes equally on in the discovery of real Truth and Certainty, whatever Sounds we make use of.

§. 10. One thing more we are to take notice of, That where GOD, or any other Law-maker, hath defined any Moral Names, there they have made the Essence of that Species to which that Name belongs; and there it is not safe to apply or use them otherwise: But in other cases 'tis bare impropriety of Speech to apply them contrary to the common usage of the Country. But yet even this too disturbs not the certainty of that Knowledge, which is still to be had by a due contemplation and comparing of those even nick-nam'd *Ideas*.

§. 11. *Thirdly*, There is another sort of *complex Ideas*, which being referred to *Archetypes without us*, may differ from them, and so our Knowledge about them, may come short of being real; and these are our *Ideas* of Substances: which consisting of a Collection of simple *Ideas*, supposed taken from the Works of Nature, may yet vary from them, by having more or different *Ideas* united in them, than are to be found united in the Things themselves: From whence it comes to pass, that they may, and often do fail of being exactly conformable to Things themselves.

§. 12. I say then, that to have *Ideas* of Substances, which, by being conformable to Things, may afford us real Knowledge, it is not enough, as in Modes, to put together such *Ideas* as have no inconsistency, though they did never before so exist. *v.g.* the *Ideas* of Sacrilege or Perjury, &c. were as real and true *Ideas* before, as after the existence of any such fact. But our *Ideas* of Substances being supposed Copies, and referred to Archetypes without us, *must still be taken from something that does or has existed*; they must not consist of *Ideas* put together at the pleasure of our Thoughts, without any real pattern they were taken from, though we can perceive no inconsistency in such a Combination. The reason whereof is, because we knowing not what real Constitution it is of Substances, whereon our simple *Ideas* depend, and which really is the cause of the strict union of some of them one with another, and the exclusion of others; there are very few of them that we can be sure are or are not inconsistent in Nature, any farther than Experience and sensible Observation reaches. Herein therefore is founded the reality of our Knowledge concerning Substances, that all our complex *Ideas* of them must be such, and such only as are made up of such simple ones, as have been discovered to co-exist in Nature. And our *Ideas* being thus true, though not, perhaps, very exact
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Copies, are yet the Subjects of real (as far as we have any) Knowledge of them; which (as has been already shewed) will not be found to reach very far: But so far as it does, it will still be real Knowledge. Whatever *Ideas* we have, the Agreement we find they have with others, will still be Knowledge. If those *Ideas* be abstract, it will be general Knowledge. But to make it real concerning Substances, the *Ideas* must be taken from the real existence of Things; whatever simple *Ideas* have been found to co-exist in any Substance, these we may with confidence join together again, and so make abstract *Ideas* of Substances. For whatever have once had an union in Nature, may be united again.

§. 13. This, if we rightly consider, and *confine not our Thoughts* and abstract *Ideas to Names*, as if there were, or could be no other *Sorts* of Things, than what known Names had *already determined*, and as it were set out, we should think of Things with greater freedom and less confusion, than perhaps we do. 'Twould possibly be thought a bold Paradox, if not a very dangerous Falshood, if I should say, that some Changelings, who have lived forty years together, without any appearance of Reason, are something between a Man and a Beast: Which prejudice is founded upon nothing else but a false Supposition, that these two Names, Man and Beast, stand for distinct Species so set out by real Essences, that there can come no other Species between them: Whereas if we will abstract from those Names; and the Supposition of such specifick Essences made by Nature, wherein all Things of the same Denominations did exactly and equally partake; if we would not fantasie, that there were a certain number of these Essences, wherein all Things, as in Molds, were cast and formed, we should find that the *Idea* of the Shape, Motion, and Life of a Man without Reason, is as much a distinct *Idea*, and makes as much a distinct sort of Things from Man and Beast, as the *Idea* of the Shape of an Ass with Reason, would be different from either that of Man or Beast, and be a Species of an Animal between, or distinct from both.

§. 14. Here every body will be ready to ask, if *Changelings* may be supposed something between Man and Beast; Pray what are they? I answer, *Changelings*; which is as good a Word to signifie something different from the signification of *MAN* or *BEAST*, as the Names Man and Beast are to have significations different one from the other. This, well considered, would resolve this matter, and shew my meaning without any more ado. But I am not so unacquainted with the Zeal of some Men, which enables them to spin Consequences, and to see Religion threatned whenever any one ventures to quit their forms of Speaking, as not to foresee what Names such a Proposition as this is like to be charged with: And without doubt it will be asked, If Changelings are something between Man and Beast, what will become of them in the other World? To which I answer, 1. It concerns me not to know or enquire. To their own Master they stand or fall: It will make their state neither better nor worse, whether we determine any thing of it, or no: They are in the hands of a faithful Creator and a bountiful Father, who disposes not of his Creatures according to our narrow Thoughts or Opinions, nor distinguishes them according to Names and Species of our Contrivance. And we that know so little of this present World we are in, may, I think, content our selves without being peremptory, in defining the different state Creatures shall come into, when they go off this Stage. It may suffice us, that he hath made known to all those, who are capable of Instruction, Discourse, and Reasoning, that they shall come to an account, and receive according to what they have done in this Body.

§. 15. But, *Secondly*, I answer, The force of these Men's Question, (*viz.* will you deprive Changelings of a future state?) is founded on one of two Suppositions, which are both false. The first is, That all Things that have the outward Shape and appearance of a Man, must necessarily be designed to an immortal future Being, after this Life. Or, *secondly*, that whatever is of humane Birth, must be so. Take away these Imaginations, and such Questions will be groundless and ridiculous. I desire then those who think there is no more but an accidental difference between themselves and Changelings, the Essence in both being exactly the same, to consider, whether they can imagine Immortality annexed to any outward shape of the Body; the very proposing it, is, I suppose, enough to make them disown it. No one yet, that ever I heard of, how much soever immersed in Matter, allow'd that Excellency to any Figure of the gross sensible outward parts, as to affirm eternal Life due to it, or necessary consequence of it; or that any mass of Matter should, after its dissolution here, be again restored hereafter to an everlasting state of Sense, Perception; and Knowledge; only because it was molded into this or that Figure, and had such a particular frame of its visible parts. Such an Opinion as this, placing Immortality in a certain superficial Figure, turns out of doors all consideration of Soul or Spirit; and upon whose account alone, some corporeal Beings have hitherto been concluded immortal, and others not. This is to attribute more to the outside, than inside of Things; to place the Excellency of a Man, more in the external Shape of his Body, than internal Perfections of his Soul; which is but little better than to annex the great and inestimable advantage of Immortality and Life everlasting, which he has above other material Beings: To annex it, I say, to the Cut of his Beard, or the Fashion of his Coat; for this or that outward Make of our Bodies, no more carries with it the hopes of an eternal Duration, than the Fashion of a Man's Suit gives him reasonable grounds to imagine it will never wear out, or that it will make him immortal. 'Twill perhaps be said, that no Body thinks that the Shape makes any thing immortal, but 'tis the Shape is the sign of a rational Soul within which is immortal. I wonder who made it the sign of any such Thing; for barely saying it, will not make it so. It would require some Proofs to persuade one of it. No Figure that I know speaks any such Language. For it may as rationally be concluded, that the dead Body of a Man, wherein there is to be found no more appearance or action of Life, than there is in a Statue, has yet nevertheless a living Soul in it, because of its shape; as that there is a rational Soul in a Changeling, because he has the outside of a rational Creature; when his Actions carry far less marks of Reason with them, in the whole course of his Life, than what are to be found in many a Beast.

§. 16. But 'tis the issue of rational Parents, and must therefore be concluded to have a rational Soul. I know not by what Logick you must conclude so. I am sure this is a Conclusion, That Men no-where allow of: For if they did, they would not make bold, as every-where they do, to destroy ill-formed and mis-shaped Productions. Ay, but these are *Monsters*. Let them be so; What will your drivling, unintelligent, intractable Changeling be? Shall a defect in the Body make a Monster; a defect in the Mind, (the far more Noble, and, in the common phrase, the far more Essential part, not? Shall the want of a Nose, or a Neck, make a Monster, and put such Issue out of the rank of Men; the want of Reason and Understanding,) not? This is to bring all back again to what was exploded just now: This is to place all in the Shape, and to take the measure of a Man only by his out-side. To shew that according to the ordinary way

way of Reasoning in this Matter, People do lay the whole stress on the Figure, and resolve the whole Essence of the Species of Man, (as they make it,) into the outward Shape, how unreasonable soever it be, and how much soever they disown it, we need but trace their Thoughts and Practice a little farther, and then it will plainly appear. The well-shaped Changeling is a Man, has a rational Soul, though it appear not; this is past doubt, say you. Make the Ears a little longer, and more pointed, and the Nose a little flatter than ordinary, and then you begin to boggle: Make the Face yet narrower, flatter, and longer, and then you begin to doubt: Add still more and more of the likeness of a Brute to it, and let the Head be perfectly that of some other Animal, then presently 'tis a Monster; and 'tis demonstration with you, that it hath no rational Soul, and must be destroy'd. Where now (I ask) shall be the just measure, which the utmost bounds of that Shape, which carries with it a rational Soul? For since there has been humane *Fetus*'s produced, half Beast, and half Man; and others three part one, and one part t'other: And so it is possible they may be in all the variety of approaches to one shape or the other, and may have several degrees of mixture of the likeness of a Man, or a Brute. I would gladly know what are those precise Lineaments, which according to this Hypothesis, are, or are not capable of a rational Soul to be joined to them? What sort of outside is the certain sign, that there is, or is not such an Inhabitant within? For till that be done, we talk at random of *Man*; and shall always, I fear, do so, as long as we give our selves up to certain Sounds, and the Imaginations of settled and fixed Species in Nature, we know not what. But after all, I desire it may be considered, that those who think they have answered the difficulty, by telling us, that a mis-shaped *Fetus* is a Monster, run into the same fault they are arguing against, by constituting a Species between Man and Beast: for what else, I pray, is their Monster in the case, (if the word *Monster* signifie any thing at all,) but something neither Man nor Beast, but partaking somewhat of either; and just so is the Changeling before mentioned. So necessary is it to quit the common notion of Species and Essences, if we will truly look into the Nature of Things, and examine them, by what our Faculties can discover in them as they exist, and not by groundless Fancies have been taken up about them.

§. 17. I have mentioned this here, because I think we cannot be too cautious, that Words and Species, in the ordinary Notions we have been used to of them, impose not on us: For I am apt to think, therein lies one great obstacle to our clear and distinct Knowledge, especially in reference to Substances; and from thence has rose a great part of the Difficulties about Truth and Certainty. Would we accustom our selves to separate our Contemplations and Reasonings from Words, we might, in a great measure, remedy this Inconvenience within our own Thoughts; but yet it would still disturb us in our Discourse with others, as long as we retained the Opinion, that Species and their Essences were any thing else but our abstract *Ideas*, (such as they are,) with Names annexed to them, to be the signs of them.

§. 18. Where-ever we perceive the Agreement or Disagreement of any of our *Ideas*, there is certain Knowledge; and where-ever we are sure those *Ideas* agree with the reality of Things, there is certain real Knowledge. Of which Agreement of our *Ideas* with the reality of Things, having here given the marks, I think I have shewn wherein it is that *Certainty*, *real Certainty*, consists; which whatever it was to others, was, I confess, to me heretofore, one of those *Desiderata* which I found great want of.

CHAP.

C H A P. V.

Of Truth in general.

§. 1. **W**Hat is *Truth*, was an Enquiry many Ages since ; and it being that which all Mankind either do, or pretend to search after, it cannot but be worth our while carefully to examine where-in it consists ; and so acquaint our selves with the Nature of it, as to observe how the Mind distinguishes it from Fallhood.

§. 2. *Truth* then seems to me, in the proper import of the Word, to signify nothing but *the joining or separating of Signs, as the Things signified by them, do agree or disagree one with another* ; which way of joining or separating of Signs, we call Proposition. So that *Truth* properly belongs only to Propositions : whereof there are two sorts, *viz.* Mental and Verbal ; as there are two sorts of Signs commonly made use of, *viz.* *Ideas* and Words.

§. 3. To form a clear Notion of *Truth*, it is very necessary to consider *Truth* of Thought, and *Truth* of Words, distinctly one from another : but yet it is very difficult to treat of them asunder. Because it is unavoidable, in treating of mental Propositions, to make use of Words ; and then the instances given of *Mental Propositions*, cease immediately to be barely Mental, and become *Verbal*. For a mental Proposition being nothing but a bare consideration of the *Ideas*, as they are in our Minds stripp'd of Names, they lose the Nature of purely mental Propositions, as soon as they are put into Words.

§. 4. And that which makes it yet *harder to treat of mental and verbal Propositions separately*, is, That most Men, if not all, in their Thinking and Reasonings within themselves, make use of Words instead of *Ideas* ; at least when the subject of their Meditation contains in It complex *Ideas*. Which is a great evidence of the imperfection and uncertainty of our *Ideas* of that kind, and may, if attentively made use of, serve for a mark to shew us, what are those Things, we have clear and perfect established *Ideas* of, and what not. For if we will curiously observe the way our Mind takes in Thinking and Reasoning, we shall find, I suppose, that when we make any Propositions within our own Thoughts, about White or Black, Sweet or Bitter, a Triangle or a Circle, we can, and often do frame in our Minds the *Ideas* themselves, without reflecting on the Names : But when we would consider, or make Propositions about the more complex *Ideas*, as of a Man, Vitriol, Fortitude, Glory, we usually put the Name for the *Idea* ; because the *Ideas* these Names stand for, being for the most part imperfect, confus'd, and undetermined, we reflect on the Names themselves, because they are more clear, certain, and distinct, and readier occur to our Thoughts, than the pure *Ideas* ; and so we make use of these Words instead of the *Ideas* themselves, even when we would meditate and reason within our selves, and make tacit mental Propositions. In Substances, as has been already noted, this is occasioned by the imperfection of our *Ideas*, we making the Name stand for the real Essence, of which we have no *Idea* at all. In Modes, it is occasioned by the great number of simple *Ideas*, that go to the making them up. For many of them being very much compounded, the Name occurs much easier, than the complex *Idea* it self, which requires time and attention to be recollected, and exactly represented to the Mind, even in those Men, who have formerly been at the pains to do it ; and is utterly impossible to be done by those, who though they have ready, in their Memory, the greatest part of the

common Words of their Language, yet perhaps never troubled themselves in all their Lives, to consider what precise *Ideas* the most of them stood for: Some confused or obscure Notions have served their turns; and many who talk very much of Religion and Conscience, of Church and Faith, of Power and Right, of Obstructions and Humours, Melancholy and Choler, would, perhaps, have little left in their Thoughts and Meditations, if one should desire them to think only of the Things themselves, and lay by those Words, with which they so often confound others, and not seldom themselves also.

§. 5. But to return to the consideration of Truth. We must, I say, observe two sorts of Propositions, that we are capable of making.

First, Mental, wherein the Ideas in our Understandings are without the use of Words put together, or separated by the Mind, perceiving, or judging of their Agreement, or Disagreement.

Secondly, Verbal Propositions, which are Words the signs of our Ideas put together or separated in affirmative or negative Sentences. By which way of affirming or denying, these Signs, made by Sounds, are as it were, put together or separated one from another. So that Proposition consists in joining, or separating Signs; and Truth consists in the putting together, or separating these Signs, according as the Things they stand for agree or disagree.

§. 6. Every one's Experience will satisfy him, that the Mind, either by perceiving or supposing the Agreement or Disagreement of any of its *Ideas*, does tacitly within it self put them into a kind of Proposition affirmative or negative, which I have endeavoured to express by the terms Putting together and Separating. But this Action of the Mind, which is so familiar to every thinking and reasoning Man, is easier to be conceived by reflecting on what passes in us, when we reason, judge, or suppose, than to be explained by Words. When a Man has in his Mind the *Idea* of two Lines, *viz.* the Side and Diagonal of a Square, whereof the Diagonal is an Inch long, he may have the *Idea* also of the division of that Line, into a certain number of equal parts; *v. g.* into Five, Ten, an Hundred, a Thousand, or any other Number, and may have the *Idea* of that Inch-Line, being divisible or not divisible, into such equal parts, as a certain number of them will be equal to the Side-line. Now whenever he perceives, believes, or supposes such a kind of Divisibility to agree or disagree to his *Idea* of that Line, he, as it were, joins or separates those two *Ideas, viz.* the *Idea* of that Line, and the *Idea* of that kind of Divisibility, and so makes a mental Proposition, which is true or false, according as such a kind of Divisibility, a Divisibility into such aliquot parts, does really agree to that Line, or no: And when *Ideas* are so put together, or separated in the Mind, as they or the Things they stand for do agree, or not, that is, as I may call it, *mental Truth*. But *Truth of Words* is something more, and that is the affirming or denying of Words one of another, as the *Ideas* they stand for agree or disagree: And this again is twofold, either *purely Verbal*, and trifling, which I shall speak of, *Chap. 10.* or *Real* and instructive; which is the Object of that real Knowledge, which we have spoken of already.

§. 7. But here again will be apt to occur the same doubt about Truth, that did about Knowledge: And it will be objected, That if Truth be nothing but the joining or separating of Words in Propositions, as the *Ideas* they stand for agree or disagree in Men's Mind, the Knowledge of *Truth* is *not so valuable a Thing*, as it is taken to be; nor worth the Pains and Time Men employ in the search of it: since *by this account*, it amounts to no

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more than the conformity of Words, to the *Chimæras* of Men's Brains. Who knows not what odd Notions many Men's Heads are fill'd with, and what strange *Ideas* all Men's Brains are capable of? But if we rest here, we know the Truth of nothing by this Rule, but of the visionary World in our own Imaginations; nor have other Truth, but what as much concerns Harpies and Centaurs, as Men and Horses. For those, and the like, may be *Ideas* in our Heads, and have their agreement and disagreement there, as well as the *Ideas* of real Beings, and so have as true Propositions made about them. And 'twill be altogether as true a Proposition, to say all Centaurs are Animals, as that all Men are Animals; and the certainty of one, as great as the other. For in both the Propositions, the Words are put together according to the agreement of the *Ideas* in our Minds: And the agreement of the *Idea* of Animal, with that of Centaur, is as clear and visible to the Mind, as the agreement of the *Idea* of Animal, with that of Man; and so these two Propositions are equally true, equally certain. But of what use is all such Truth to us?

§. 8. Though what has been said in the fore-going Chapter, to distinguish real from imaginary Knowledge, might suffice here, in answer to this Doubt, to distinguish real Truth from chimerical, or (if you please,) barely nominal, they depending both on the same foundation; yet it may not be amiss here again to consider, that though our Words signify nothing but our *Ideas*, yet being designed by them to signify Things, the *Truth* they contain, when put into Propositions, will be only *Verbal*, when they stand for *Ideas* in the Mind, that have not an agreement with the reality of Things. And therefore Truth, as well as Knowledge, may well come under the distinction of Verbal and Real; that being only verbal Truth wherein Terms are joined, according to the agreement or disagreement of the *Ideas* they stand for, without regarding whether our *Ideas* are such as really have, or are capable of having an Existence in Nature. But then it is they contain *real Truth*, when these signs are joined as our *Ideas* agree, and when our *Ideas* are such, as we know are capable of having an Existence in Nature; which in Substances we cannot know, but by knowing that such have existed.

§. 9. *Truth* is the marking down in Words, the agreement or disagreement of *Ideas* as it is. *Falshood* is the marking down in Words, the agreement or disagreement of *Ideas* otherwise than it is. And so far as these *Ideas*, thus marked by Sounds, agree to their Archetypes, so far only is the Truth real. The knowledge of this Truth, consists in knowing what *Ideas* the Words stand for, and the perception of the agreement or disagreement of those *Ideas*, according as it is marked by these Words.

§. 10. But because Words are looked on as the great Conduits of Truth and Knowledge; and that in conveying and receiving of Truth, and commonly in reasoning about it, we make use of Words and Propositions, I shall more at large enquire, wherein the certainty of real Truths, contained in Propositions, consists, and where it is to be had; and endeavour to shew in what sort of universal Propositions we are capable of being certain of their real Truth, or Falshood.

I shall begin with general Propositions, as those which most employ our Thoughts, and exercise our Contemplation. General Truths are most looked after by the Mind, as those that most enlarge our Knowledge; and by their comprehensiveness, satisfying us at once of many particulars, enlarge our view, and shorten our way to Knowledge.

§. 11. Besides Truth taken in the strict sense before-mentioned, there are other sorts of Truths; as, 1. *Moral Truth*, which is speaking Things according to the persuasion of our own Minds, though the Proposition we speak agree not to the reality of Things. 2. *Metaphysical Truth*, which is nothing but the real Existence of Things, conformable to the *Ideas* to which we have annexed their Names. This, though it seems to consist in the very Beings of Things, yet when considered a little nearly, will appear to include a tacit Proposition, whereby the Mind joins that particular Thing, to the *Idea* it had before settled with a name to it. But these Considerations of Truth, either having been before taken notice of, or not being much to our present purpose, it may suffice here only to have mentioned them.

CHAP. VI.

Of Universal Propositions, their Truth and Certainty.

§. 1. **T**Hough the examining and judging of *Ideas* by themselves, their Names being quite laid aside, be the best and surest way to clear and distinct Knowledge: yet through the prevailing custom of using Sounds for *Ideas*, I think it is very seldom practised; and every one may observe how common it is for Names to be made use of, instead of the *Ideas* themselves, even when Men think and reason within their own Breasts; especially if the *Ideas* be very complex, and made up of a great Collection of simple ones. This makes the consideration of Words and Propositions, so necessary a part of the Treatise of Knowledge, that 'tis very hard to speak intelligibly of the one, without explaining the other.

§. 2. All the Knowledge we have, being only of particular or general Truths, 'tis evident, that whatever may be done in the former of these, the latter, which is that which with Reason is most sought after, can never be well made known, and is very seldom apprehended, but as conceived and expressed in Words. It is not therefore out of our way, in the Examination of our Knowledge, to enquire into the Truth and Certainty of universal Propositions.

§. 3. But that we may not be misled in this case, by that which is the danger every-where, I mean by the doubtfulness of Terms, 'tis fit to observe, that Certainty is twofold; *Certainty of Truth*, and *Certainty of Knowledge*. Certainty of Truth is, when Words are so put together in Propositions, as exactly to express the agreement or disagreement of the *Ideas* they stand for, as really it is: Certainty of Knowledge, is to perceive the agreement or disagreement of *Ideas*, as expressed in any Proposition. This we usually call knowing, or being certain of the Truth of any Proposition.

§. 4. Now because we cannot be certain of the Truth of any general Proposition, unless we know the precise bounds and extent of the Species its Terms stand for, it is necessary we should know the Essence of each Species, which is that which constitutes and bounds it. This, in all simple *Ideas* and Modes, is not hard to do: for in these, the real and nominal Essence being the same; or, which is all one, the abstract *Idea*, the general Term stands for, being the sole Essence and boundary, that is or can be supposed, of the Species, there can be no doubt how far the Species extends, or what Things are comprehended under each Term; which, 'tis evident,

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are all that have an exact conformity with the *Idea* it stands for, and no other. But in Substances, where a real Essence, distinct from the nominal, is supposed to constitute, determine, and bound the Species, there the extent of the general Word is very uncertain: because not knowing this real Essence, we cannot know what is, or is not of that Species, and consequently what may, or may not with certainty be affirmed of it. And thus speaking of a Man, or Gold, or any other Species of natural Substances, as supposed made by Nature, and partaking of that real Essence, which is supposed to constitute that Species, we cannot be certain of the truth of any Affirmation or Negation made of it. For *Man*, or *Gold*, taken in this sense, and used for Species of Things, constituted by real Essences, different from the complex *Idea* in the Mind of the Speaker, stand for we know not what; and the extent of these Species, with such Boundaries, are so unknown and undetermined, that it is impossible, with any certainty, to affirm, that all Men are rational, or that all Gold is yellow. But where the nominal Essence is kept to, as the boundary of each Species, and Men extend the Application of any general Term no farther than to the particular Things, in which the complex *Idea* it stands for, is to be found, there they are in no danger to mistake the bounds of each Species, or be in doubt, on this account, whether any Proposition be true, or no. I have chose to explain this uncertainty of Propositions in this scholastick way, and have made use of the Terms of *Essences* and *Species*, on purpose to shew the absurdity and inconvenience there is to think of them, as of any other sort of Realities, than barely abstract *Ideas* with Names to them. To suppose, that the Species of Things are any thing but the sorting of them under general Names, according as they agree to several abstract *Ideas*, of which we make those Names the Signs, is to confound Truth, and introduce Uncertainty into all general Propositions, that can be made about them. Though therefore these Things might, to People not possessed with scholastick Learning, be perhaps treated of, in a better and clearer way; yet those wrong Notions of Essences and Species, having got root in most Peoples Minds, who have received any tincture from the Learning, which has prevailed in this part of the World, are to be discovered and removed, to make way for that use of Words, which should convey certainty with it.

§. 5. *The Names of Substances then, whenever made to stand for Species; which are supposed to be constituted by real Essences, which we know not, are not capable to convey Certainty to the Understanding: Of the Truth of general Propositions made up of such Terms, we cannot be sure.*

§. 6. On the other side, the *Names of Substances*, when made use of, as they should be, for the *Ideas* Men have in their Minds, though they carry a clear and determinate signification with them, *will not yet serve us to make many universal Propositions, of whose Truth we can be certain.* Not because in this use of them we are uncertain what Things are signified by them, but because the complex *Ideas* they stand for, are such Combinations of simple ones, as carry not with them any discoverable connexion or repugnancy, but with a very few other *Ideas*.

§. 7. The complex *Ideas*, that our Names of Substances properly stand for, are Collections of such Qualities, as have been observed to co-exist: but what other Qualities necessarily co-exist with such Combinations, we cannot certainly know, unless we can discover their natural dependence; which in their primary Qualities, we can go but a very little way in; and in all their secondary Qualities, we can discover no connexion at all, for the Reasons mentioned, Chap. 3. viz. 1. Because we know not the real

real Constitutions of Substances, on which each secondary Quality particularly depends. 2. Did we know that, it would serve us only for experimental (not universal) Knowledge; and reach with certainty no farther, than that bare instance: because our Understandings can discover no conceivable connexion between any secondary Quality, and any modification whatsoever, of any of the primary ones. And therefore there are *very few general Propositions to be made concerning Substances, which can carry with them undoubted Certainty.*

§. 8. All *Gold* is fixed, is a Proposition whose Truth we cannot be certain of, how universally soever it be believed. For if, according to the useless Imagination of the Schools, any one supposes the term *Gold* to stand for a Species of Things set out by Nature, by a real Essence belonging to it, 'tis evident he knows not what particular Substances are of that Species; and so cannot, with certainty, affirm any thing universally of *Gold*. But if he make *Gold* stand for a Species, determined by its nominal Essence, let the nominal Essence, for example, be the complex *Idea* of a Body of a certain yellow colour, malleable, fusible, and heavier than any other known; in this proper use of the word *Gold*, there is no difficulty to know what is, or is not *Gold*: but yet no other Quality can with certainty be universally affirmed or denied of *Gold*, but what hath a discoverable connexion, or inconsistency with that nominal Essence. Fixedness, for example, having no necessary connexion, that we can discover, with the Colour, Weight, or any other simple *Idea* of our complex one, or with the whole Combination together; it is impossible that we should certainly know the Truth of this Proposition, That all *Gold* is fixed.

§. 9. As there is no discoverable connexion between Fixedness, and the Colour, Weight, and other simple *Ideas* of that nominal Essence of *Gold*; so if we make our complex *Idea* of *Gold*, a Body yellow, fusible, ductile, weighty, and fixed, we shall be at the same uncertainty concerning Solubility in *Aq. regia*; and for the same reason: since we can never, from consideration of the *Ideas* themselves, with certainty affirm or deny, of a Body whose complex *Idea* is made up of yellow, very weighty, ductile, fusible, and fixed, that it is soluble in *Aq. regia*: and so on of the rest of its Qualities. I would gladly meet with one general Affirmation, concerning any Quality of *Gold*, that any one can certainly know is true. It will, no doubt, be presently objected, Is not this an universal certain Proposition, All *Gold* is malleable? To which I answer, It is a very certain Proposition, if Malleableness be a part of the complex *Idea* the word *Gold* stands for. But then here is nothing affirmed of *Gold*, but that that Sound stands for an *Idea* in which Malleableness is contained: and such a sort of Truth and Certainty as this, it is to say a Centaur is four-footed. But if Malleableness make not a part of the specifick Essence the name *Gold* stands for, 'tis plain, *All Gold is malleable*, is not a certain Proposition: because let the complex *Idea* of *Gold*, be made up of whichsoever of its other Qualities you please, Malleableness will not appear to depend on that complex *Idea*, nor follow from any simple one contained in it. The connexion that Malleableness has (if it has any) with those other Qualities, being only by the intervention of the real Constitution of its insensible parts, which, since we know not, 'tis impossible we should perceive that connexion, unless we could discover that which ties them together.

§. 10. The more, indeed, of these co-existing Qualities we unite into one complex *Idea*, under one name, the more precise and determinate we make the signification of that Word, but yet never make it more capable of universal Certainty, in respect of other Qualities, not contained in our complex

complex *Idea* ; since we perceive not their connexion, or dependence one on another, being ignorant both of that real Constitution in which they are all founded; and also how they flow from it. For the chief part of our Knowledge concerning Substances, is not as in other Things, barely of the relation of two *Ideas* that may exist separately ; but of the necessary connexion and co-existence of several distinct *Ideas* in the same Subject, or of their repugnancy so to co-exist. Could we begin at the other end, and discover what it was wherein that Colour consisted, what made a Body lighter or heavier, what texture of Parts made it malleable, fusible, and fixed, and fit to be dissolved in this sort of Liquor, and not in another; if (I say) we had such an *Idea* as this of Bodies, and could perceive wherein all sensible Qualities originally consist, and how they are produced; we might frame such abstract *Ideas* of them, as would furnish us with matter of more general Knowledge, and enable us to make universal Propositions, that should carry general Truth and Certainty with them. But whilst our complex *Ideas* of the sorts of Substances, are so remote from that internal real Constitution, on which their sensible Qualities depend, and are made up of nothing but an imperfect Collection of those apparent Qualities our Senses can discover, there can be very few general Propositions concerning Substances, of whose real Truth we can be certainly assured ; since there are but few simple *Ideas*, of whose connexion and necessary co-existence, we can have certain and undoubted Knowledge. I imagine, amongst all the secondary Qualities of Substances, and the Powers relating to them, there cannot any two be named, whose necessary co-existence, or repugnance to co-exist, can certainly be known, unless in those of the same sense, which necessarily exclude one another, as I have elsewhere shewed. No one, I think, by the Colour that is in any Body, can certainly know what Smell, Taste, Sound, or tangible Qualities it has, nor what Alterations it is capable to make, or receive, on, or from other Bodies: the same may be said of the Sound, or Taste, &c. Our specific Names of Substances, signifying any Collections of such *Ideas*, 'tis not to be wondered, that we can, with them, make very few general Propositions of undoubted real certainty : but yet so far as any complex *Idea*, of any sort of Substances, contains in it any simple *Idea*, whose necessary co-existence with any other may be discovered, so far universal Propositions may with certainty be made concerning it: v.g. Could any one discover a necessary connexion between Malleableness, and the Colour or Weight of Gold, or any other part of the complex *Idea* signified by that Name, he might make a certain universal Proposition concerning Gold in this respect ; and the real Truth of this Proposition, That all Gold is malleable, would be as certain as of this, The three Angles of all right-lined Triangles, are equal to two right ones.

§. II. Had we such *Ideas* of Substances, as to know what real Constitutions produce those sensible Qualities we find in them, and how those Qualities flowed from thence, we could, by the specific *Ideas* of their real Essences in our own Minds, more certainly find out their Properties, and discover what Qualities they had, or had not, than we can now by our Senses: and to know the Properties of Gold, it would be no more necessary, that Gold should exist, and that we should make Experiments upon it, than it is necessary for the knowing the Properties of a Triangle, that a Triangle should exist in any Matter, the *Idea* in our Minds would serve for the one, as well as the other. But we are so far from being admitted into the Secrets of Nature, that we scarce so much as ever approach the first entrance towards them. For we are wont to consider the Substances we meet with, each of them, as an entire

entire thing by it self, having all its Qualities in it self, and independent of other Things; overlooking, for the most part, the Operations of those invisible Fluids, they are encompassed with; and upon whose Motions and operations depend the greatest part of those qualities which are taken notice of in them, and are made by us the inherent marks of Distinction, whereby we know and denominate them. Put a piece of Gold any where by it self, let no other Body encompass it, it will immediately lose all its Colour and Weight, and perhaps Malleableness too; which, for ought I know, would be changed into a perfect Friability. Water, in which to us Fluidity is an essential Quality, left to it self, would cease to be fluid. But if inanimate Bodies owe so much of their present state to other Bodies without them, that they would not be what they appear to us, were those Bodies that environ them removed, it is yet more so in Vegetables, which are nourished, grow, and produce Leaves, Flowers, and Seeds, in a constant Succession. And if we look a little nearer into the state of Animals, we shall find, that their Dependence, as to Life, Motion, and the most considerable Qualities to be observed in them, is so wholly on extrinsical Causes and Qualities of other Bodies, that make no part of them, that they cannot subsist a moment without them: though yet those Bodies on which they depend, are little taken notice of, and make no part of the complex *Ideas*, we frame of those Animals. Take the Air but a minute from the greatest part of living Creatures, and they presently lose Sense, Life, and Motion. This the necessity of breathing has forced into our Knowledge: But how many other extrinsical, and possibly very remote Bodies, do the Springs of those admirable Machines depend on, which are not vulgarly observed, or so much as thought on; and how many are there, which the severest Enquiry can never discover? The Inhabitants of this spot of the Universe, though removed so many millions of Miles from the Sun, yet depend so much on the duly tempered motion of Particles coming from, or agitated by it, that were this Earth removed, but a small part of that distance, out of its present situation, and placed a little farther or nearer that Source of Heat, 'tis more than probable, that the greatest part of the Animals in it, would immediately perish: since we find them so often destroy'd by an excess or defect of the Sun's warmth, which an accidental position, in some parts of this our little Globe, exposes them to. The Qualities observed in a Load-stone, must needs have their Source far beyond the Confines of that Body: and the ravage made often on several sorts of Animals, by invisible Causes; the certain death (as we are told) of some of them, by barely passing the Line, or, as 'tis certain of others, by being removed into a Neighbouring-Country, evidently shew, that the Concurrence and Operation of several Bodies, with which they are seldom thought to have any thing to do, is absolutely necessary to make them be what they appear to us, and to preserve those Qualities we know, and distinguish them by. We are then quite out of the way, when we think, that Things contain within themselves the Qualities, that appear to us in them: And we in vain search for that Constitution within the Body of a Fly, or an Elephant, upon which depend those Qualities and Powers we observe in them; for which, perhaps, to understand them aright, we ought to look not only beyond this our Earth and Atmosphere, but even beyond the Sun, or remotest Star our Eyes have yet discovered: For how much the Being and Operation of particular Substances in this our Globe, depend on Causes utterly beyond our view, is impossible for us to determine. We see and perceive some of the Motions and grosser Operations of Things here about us; but whence the Streams come that

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keep all these curious Machines in motion and repair, how conveyed and modified, is beyond our notice and apprehension; and the great Parts and Wheels, as I may so say, of this stupendous Structure of the Universe, may, for ought we know, have such a connexion and dependence in their Influences and Operations one upon another, that, perhaps, Things in this our Mansion, would put on quite another face, and cease to be what they are, if some one of the Stars, or great Bodies incomprehensibly remote from us, should cease to be, or move as it does. This is certain, Things, however absolute and entire they seem in themselves, are but Retainers to other parts of Nature, for that which they are most taken notice of by us: Their observable Qualities, Actions, and Powers, are owing to something without them; and there is not so complete and perfect a part, that we know, of Nature, which does not owe the Being it has, and the Excellencies of it, to its Neighbours; and *we must look a great deal farther than the Surface of any Body, to comprehend perfectly those Qualities that are in it.*

§. 12. If this be so, it is not to be wondred, that *we have very imperfect Ideas of Substances*; and that the real Essences, on which depend their Properties and Operations, are unknown to us. We cannot discover so much as the size, figure, and texture of their minute and active Parts, which is really in them; much less the different Motions and Impulses made in and upon them by Bodies from without, and the Effects of them, upon which depend, and by which is formed the greatest and most remarkable part of those Qualities we observe in them, and of which our complex *Ideas* of them are made up. This consideration alone may set us at rest, as to all hopes of our having the *Ideas* of their real Essences; which, whilst we want the nominal Essences we make use of instead of them, will be able to furnish us but very sparingly with any general Knowledge, or universal Propositions capable of real Certainty.

§. 13. We are not therefore to wonder, if Certainty be to be found in very few general Propositions made concerning Substances: Our Knowledge of their Qualities and Properties go very seldom farther than our Senses reach and inform us. Possibly inquisitive and observing Men may, by strength of *Judgment*, *penetrate farther*, and on Probabilities taken from wary Observation, and Hints well laid together, often guess right at what Experience has not yet discovered to them. But this is but guessing still; it amounts only to Opinion, and has not that certainty which is requisite to Knowledge: For all general Knowledge lies only in our own Thoughts, and consists barely in the contemplation of our own abstract *Ideas*. Wherever we perceive any agreement or disagreement amongst them, there we have general Knowledge; and by putting the Names of those *Ideas* together accordingly in Propositions, can with certainty pronounce general Truths. But because the abstract *Ideas* of Substances, for which their specifick Names stand, whenever they have any distinct and determinate signification, have a discoverable connexion or inconsistency with a very few other *Ideas*, the certainty of universal Propositions concerning Substances, is very narrow and scanty in that part, which is our principal enquiry concerning them: and there is scarce any of the Names of Substances, let the *Idea* it is applied to be what it will, of which we can generally, and with certainty pronounce, that it has or has not this or that other Quality belonging to it, and constantly co-existing or inconsistent with that *Idea*, where-ever it is to be found.

§. 14. Before we can have any tolerable knowledge of this kind, we must first know what Changes the primary Qualities of one Body, do regularly produce in the primary Qualities of another, and how. Secondly, we must know what primary Qualities of any Body, produce certain Sensations or *Ideas* in us; which, in truth, to know all the Effects of Matter, under its divers modifications of Bulk, Figure, Cohesion of Parts, Motion, and Rest; which is, I think, every body will allow, is utterly impossible to be known by us, without revelation: Nor if it were revealed to us, what sort of Figure, Bulk, and Motion of Corpuscles, would produce in us the Sensation of a yellow Colour, and what sort of Figure, Bulk, and Texture of Parts in the superficies of any Body, were fit to give such Corpuscles their due motion to produce that Colour, Would that be enough to make universal Propositions with certainty, concerning the several sorts of them, unless we had Faculties acute enough to perceive the Bulk, Figure, Texture, and Motion of Bodies in those minute Parts by which they operate on our Senses, and so could by those frame our abstract *Ideas* of them. I have mentioned here only corporeal Substances, whose Operations seem to lie more level to our Understandings: For as to the Operations of Spirits, both their thinking and moving of Bodies, we at first sight find our selves at a loss; though perhaps, when we have applied our Thoughts a little nearer to the consideration of Bodies, and their Operations, and examined how far our Notions, even in these, reach with any clearness, beyond sensible matter of fact, we shall be bound to confess, that even in these too, our Discoveries amount to very little beyond perfect Ignorance and Incapacity.

§. 15. This is evident, *the abstract complex Ideas of Substances*, for which their general Names stand, *not comprehending their real Constitutions*, can afford us but very little universal Certainty; they not being that on which those Qualities we observe in them, and would inform our selves about, do depend, or with which they have any certain connexion. *v. g.* Let the *Idea* to which we give the name *Man*, be, as it commonly is, a Body of the ordinary shape, with Sense, voluntary Motion, and Reason join'd to it. This being the abstract *Idea*, and consequently the Essence of our Species *Man*, we can make but very few general certain Propositions concerning *Man*, standing for such an *Idea*. Because not knowing the real Constitution on which Sensation, power of Motion, and Reasoning, with that peculiar Shape, depend, and whereby they are united together in the same Subject, there are very few other Qualities, with which we can perceive them to have a necessary connexion: and therefore we cannot with Certainty affirm, That all Men sleep by intervals; That no Man can be nourished by Wood or Stones; That all Men will be poisoned by Hemlock: because these *Ideas* have no connexion nor repugnancy with this our nominal Essence of *Man*, with this abstract *Idea* that Name stands for. We must in these and the like appeal to trial in particular Subjects, which can reach but a little way. We must content our selves with Probability in the rest: but can have no general Certainty, whilst our specifick *Idea* of *Man*, contains not that real Constitution, which is the root, wherein all his inseparable Qualities are united, and from whence they flow; whilst our *Idea*, the word *Man* stands for, is only an imperfect Collection of some sensible Qualities and Powers in him, there is no discernible connexion or repugnance between our specifick *Idea*, and the Operation of either the Parts of Hemlock or Stones, upon his Constitution. There are Animals that safely eat Hemlock, and others that are nourished by Wood and Stones: But

as long as we want *Ideas* of those real Constitutions of Animals, whereon these, and the like Qualities and Powers depend; we must not hope to reach Certainty in universal Propositions concerning them. Those few *Ideas* only, which have a discernible connexion with our nominal Essence, or any part of it, can afford us such Propositions. But these are so few, and of so little moment, that we may justly look on our certain general Knowledge of Substances, as almost none at all.

§. 16. To conclude, General Propositions, of what kind soever, are then only capable of Certainty, when the Terms used in them, stand for such *Ideas*, whose agreement or disagreement, as there expressed, is capable to be discovered by us. And we are then certain of their Truth or Falshood, when we perceive the *Ideas* they stand for, to agree or not agree, according as they are affirmed or denied one of another. Whence we may take notice, that *general Certainty is never to be found but in our Ideas*. Whenever we go to seek it elsewhere in Experiments, or Observations without us, our Knowledge goes not beyond particulars. 'Tis the contemplation of our own abstract *Ideas*, that alone is able to afford us general Knowledge.

C H A P. VII.

Of Maxims.

§. 1. **T**Here are a sort of Propositions, which under the name of *Maxims* and *Axioms*, have passed for Principles of Science: and because they are *self-evident*, have been supposed innate, without that any Body (that I know) ever went about to shew the reason and foundation of their clearness or cogency. It may however be worth while, to enquire into the reason of their evidence, and see whether it be peculiar to them alone; and also examine how far they influence and govern our other Knowledge.

§. 2. *Knowledge*, as has been shewn, consists in the perception of the agreement or disagreement of *Ideas*: Now *where that agreement or disagreement is perceived immediately by it self, without the intervention or help of any other, there our Knowledge is self-evident*. This will appear to be so to any one, who will but consider any of these Propositions, which, without any proof, he assents to at first sight: for in all these he will find, that the reason of his Assent, is from that agreement or disagreement the Mind, by an immediate comparing them, finds in those *Ideas* answering the Affirmation or Negation in the Proposition.

§. 3. This being so, in the next place let us consider, whether this Self-evident be peculiar only to these Propositions, which are received for Maxims, and have the dignity of Axioms allowed them; and here 'tis plain, that several other Truths, not allow'd to be Axioms, partake equally with them in this Self-evidence. This we shall see, if we go over these several sorts of agreement or disagreement of *Ideas*, which I have above mentioned, *viz.* Identity, Relation, Co-existence, and real Existence; which will discover to us, that *not only those few Propositions, which have had the credit of Maxims, are self-evident, but a great many, even almost an infinite number of other Propositions* are such.

§. 4. For, *First*, the immediate perception of the agreement or disagreement of *Identity*, being founded in the Mind's having distinct *Ideas*, this affords us as many self-evident Propositions, as we have distinct *Ideas*.

Every one that has any Knowledge at all, has, as the foundation of it, various and distinct *Ideas*: And it is the first act of the Mind, (without which, it can never be capable of any Knowledge,) to know every one of its *Ideas* by it self, and distinguish it from others. This is that which every one finds in himself, that the *Ideas* he has he knows; he knows also when any one is in his Understanding, and what it is: And when more than one are there, he knows them distinctly and unconfusedly one from another: Which always being so, (it being impossible but that he should perceive what he perceives,) he can never be in doubt when any *Idea* is in his Mind, that it is there, and is that *Idea* it is; and that two distinct *Ideas*, when they are in his Mind, are there, and are not one and the same *Idea*. So that all such Affirmations, and Negations, are made without any possibility of doubt, uncertainty, or hesitation, and must necessarily be assented to, as soon as understood; that is, as soon as we have, in our Minds, the *Ideas* clear and distinct, which the Terms in the Proposition stand for. It is not therefore alone to these two general Propositions, *Whatsoever is, is*; and, *It is impossible for the same Thing to be, and not to be*, that this Self-evidence belongs by any peculiar right. The perception of being, or not being, belongs no more to these vague *Ideas*, signified by the terms *Whatsoever*, and *Thing*, than it does to any other *Ideas*. The Mind, without the help of any proof, perceives as clearly, and knows as certainly, that the *Idea* of *White*, is the *Idea* of *White*, and not the *Idea* of *Blue*; and that the *Idea* of *White*, when it is in the Mind, is there, and is not absent; and so a *Triangle*, *Motion*, a *Man*, or any other *Ideas* whatsoever. So that in respect of Identity, our intuitive Knowledge reaches as far as our *Ideas*: And so we are capable of making as many self-evident Propositions, as we have names for distinct *Ideas*. And I appeal to ever one's own Mind, whether this Proposition, *A Circle is a Circle*, be not as self-evident a Proposition, as that consisting of more general terms, *Whatsoever is, is*: And again, whether this Proposition, *Blue is not Red*, be not a Proposition that the Mind can no more doubt of, as soon as it understands the Words, than it does of that Axiom, *It is impossible for the same thing to be, and not to be*? and so of all the like.

§. 5. Secondly, As to *Co-existence*, or such a necessary connexion between two *Ideas*, that in the Subject where one of them is supposed, there the other must necessarily be also: Of such agreement, or disagreement as this, the Mind has an immediate perception but in very few of them. And therefore in this sort, we have but very little intuitive Knowledge: nor are there to be found very many Propositions that are self-evident, though some there are; v. g. the *Idea* of filling of a place equal to the Contents of its superficies, being annexed to our *Idea* of *Body*, I think it is a self-evident Proposition, *That two Bodies cannot be in the same place*.

§. 6. Thirdly, As to the *Relations* of Modes, Mathematicians have framed many Axioms concerning that one Relation of Equality. As Equals taken from Equals, the remainder will be Equals; which, with the rest of that kind, however they are received for Maxims by the Mathematicians, and are unquestionable Truths; yet, I think, that any one who considers them, will not find, that they have a clearer self-evidence than these, that one and one, are equal to two; that if you take from the five Fingers of one Hand two, and from the five Fingers of the other Hand two, the remaining number will be equal. These, and a thousand other such Propositions, may be found in Numbers, which, at very first hearing,

ring, force the assent, and carry with them an equal, if not greater clearness, than those mathematical Axioms.

§. 7. *Fourthly*, As to *real Existence*, since that has no connexion with any other of our *Ideas*, but that of our selves, and of a first Being, we have in that, concerning the real existence of all other Beings, not so much as demonstrative, much less a self-evident Knowledge: And therefore concerning those there are no Maxims,

§. 8. In the next place let us consider, *what influence those received Maxims have, upon the other parts of our Knowledge*. The Rules established in the Schools, that all Reasonings are *exp^ræcognitis*, & *præ^rincipiis*, seem to lay the foundation of all other Knowledge, in these Maxims, and to suppose them to be *præcognita*; whereby, I think, is meant these two things: First, That these Axioms, are those Truths that are first known to the Mind; and, secondly, That upon them, the other parts of our Knowledge depend.

§. 9. *First*, That they are not the *Truths first known* to the Mind, is evident to Experience. Who perceives not, that a Child certainly knows, that a Stranger is not its Mother; that its Sucking-bottle is not the Rod, long before he knows, that *'tis impossible for the same thing to be, and not to be*: And how many Truths are there about Numbers, which it is obvious to observe, that the Mind is perfectly acquainted with, and fully convinced of, before it ever thought on these general Maxims, to which Mathematicians, in their Arguings, do sometimes refer them? Whereof the reason is very plain: For that which makes the Mind assent to such Propositions, being nothing else but the perception it has of the agreement, or disagreement of its *Ideas*, according as it finds them affirmed or denied one of another, in Words it understands; and every *Idea* being known to be what it is, and every two distinct *Ideas* not to be same, it must necessarily follow, that such self-evident Truths, must be first known, which consist of *Ideas* that are first in the Mind: and the *Ideas* first in the Mind, 'tis evident, are those of particular Things, from whence, by slow degrees, the Understanding proceeds to some few general ones; which being taken from the ordinary and familiar Objects of Sense, are settled in the Mind, with general Names to them. Thus particular *Ideas* are first received and distinguished, and so Knowledge got about them: and next to them, the less general, or specifick, which are next to particular. For abstract *Ideas* are not so obvious or easie to Children, or the yet unexercised Mind, as particular ones. If they seem so to grown Men, 'tis only because by constant and familiar use they are made so: For when we nicely reflect upon them, we shall find, that general *Ideas* are Fictions and Contrivances of the Mind, that carry difficulty with them, and do not so easily offer themselves, as we are apt to imagine. For example, Does it not require some pains and skill to form the general *Idea* of a Triangle, (which is yet none of the most abstract, comprehensive, and difficult,) for it must be neither Oblique, nor Rectangle, neither Equilateral, Equicrural, nor Scalene; but all and none of these at once. In effect, it is something imperfect, that cannot exist; an *Idea* wherein some parts of several different and inconsistent *Ideas* are put together. 'Tis true, the Mind in this imperfect state, has need of such *Ideas*, and makes all the haste to them it can, for the conveniency of Communication, and Enlargement of Knowledge; to both which, it is naturally very much inclined. But yet one has reason to suspect such *Ideas* are marks of our Imperfection; at least, this is enough to shew, that the most abstract and general *Ideas*, are not those that the Mind is first and most easily acquir-

acquainted with, nor such as its earliest Knowledge is conversant about.

§. 10. Secondly, From what has been said, it plainly follows, that *these* magnified *Maxims*, are not the Principles and Foundations of all our other Knowledge. For if there be a great many other Truths, which have as much self-evidence as they, and a great many that we know before them, it is impossible they should be the Principles, from which we deduce all other Truths. Is it impossible to know that *One* and *Two* are equal to *Three*, but by virtue of this, or some such Axiom, viz. the Whole is equal to all its Parts taken together? Many a one knows that *One* and *Two* are equal to *Three*, without having heard, or thought on that, or any other Axiom, by which it might be proved; and knows it as certainly as any other Man knows, that the Whole is equal to all its Parts, or any other Maxim, and all from the same Reason of self-evidence; the Equality of those *Ideas*, being as visible and certain to him without that, or any other Axiom, as with it, it needing no proof to make it perceived. Nor after the Knowledge, That the Whole is equal to all its Parts, does he know that one and two are equal to three, better, or more certainly than he did before. For if there be any odds in those *Ideas*, the Whole and Parts are more obscure, or at least more difficult to be settled in the Mind, than those of *One*, *Two*, and *Three*. And indeed, I think, I may ask these Men, who will needs have all Knowledge besides those general principles themselves, to depend on general, innate, and self-evident Principles, What Principle is requisite to prove, that *One* and *One* are *Two*, that *Two* and *Two* are *Four*, that *Three* times *Two* are *Six*? which being known without any proof, do evince, That either all Knowledge does not depend on certain *Præcognita* or general Maxims, called Principles; or else that these are Principles: and if these are to be counted Principles, a great part of Numeration will be so. To which if we add all the self-evident Propositions, may be made about all our distinct *Ideas*, Principles will be almost infinite, at least innumerable, which Men arrive to the Knowledge of, at different Ages; and a great many of these innate Principles, they never come to know all their Lives. But whether they come in view of the Mind, earlier or later, this is true of them, that they are all known by their native Evidence, are wholly independent, receive no Light, nor are capable of any proof one from another; much less the more particular, from the more general; or the more simple, from the more compounded: the more simple, and less abstract, being the most familiar, and the easier and earlier apprehended. But whichever be the clearest *Ideas*, the Evidence and Certainty of all such Propositions is in this, That a Man sees the same *Idea* to be the same *Idea*, and infallibly perceives two different *Ideas* to be different *Ideas*. For when a Man has in his Understanding, the *Ideas* of one and of two, the *Idea* of Yellow and the *Idea* of Blue, he cannot but certainly know, that the *Idea* of One is the *Idea* of One, and not the *Idea* of Two; and that the *Idea* of Yellow is the *Idea* of Yellow, and not the *Idea* of Blue. For a Man cannot confound the *Ideas* in his Mind, which he has distinct: That would be to have them confused and distinct at the same time, which is a contradiction: And to have none distinct, is to have no use of our Faculties, to have no Knowledge at all. And therefore what *Idea* soever is affirmed of it self; or whatsoever two entire distinct *Ideas* are denied one of another, the Mind cannot but assent to such a Proposition, as infallibly true, as soon as it understands the Terms, without Hesitation or need of Proof, or regarding those made in more general Terms, and called Maxims.

§. 110 What shall we then say, Are these *general Maxims* of no use? Yes, they are of great Use in Disputes, to stop the Mouths of Wranglers; but not of much Use to the discovery of unknown Truths; or to help the Mind forwards, in its search after Knowledge. For whoever began to build his Knowledge on this general Proposition, *What is, is: or it is impossible for the same thing to be, and not to be;* and from either of these, as from a Principle of Science, deduced a System of useful Knowledge? Wrong Opinions, often involving Contradictions, one of these Maxims, as a Touch-stone, may serve well to shew whither they lead: But yet, however fit, to lay open the Absurdity or Mistake of a Man's Reasoning or Opinion, they are of very little Use for enlightning the Understanding: And it will not be found, that the Mind receives much help from them in its Progress in Knowledge; which would be neither less, nor less certain, were these two general Propositions never thought on. 'Tis true, as I have said, they sometimes serve in Argumentation to stop a Wrangler's Mouth, by shewing the Absurdity of his Opinion. But it is one thing; to shew a Man that he is in an Error; and another, to put him in possession of Truth: and I would fain know what Truths these Propositions are able to teach; and by their Influence make us know, which we did not know before, or could not know without them. Let us reason from them, as well as we can, they are only about identical Predications, and influence, if any at all, none but such. Each particular Proposition concerning Identity or Diversity, is as clearly and certainly known in it self, if attended to, as either of these general ones: and there is nothing more certain, than that by these Maxims alone we cannot evidence to our selves the Truth of any one thing really existing. As to other less general Maxims, many of them are no more than bare verbal Propositions, and teach us nothing but the Respect and Import of Names one to another. *The Whole is equal to all its Parts*, What real Truth I beseech you does it teach us? What more is contained in that Maxim, than what the Signification of the Word *Totum*, or the Whole, does of it self import? And he that knows that the Word *Whole*, stands for what is made up of all its Parts, knows very little less, than that the *Whole* is equal to all its Parts. And upon the same ground, I think that this Proposition, *A Hill is higher than a Valley*, and several the like, may also pass for Maxims. But yet Mathematicians do not without Reason place this, and some other such, amongst their Maxims, that their Scholars, having in the entrance perfectly acquainted their Thoughts with these Propositions, made in such general Terms, may have them ready to apply to all particular Cases: not that if they be equally weighed, they are more clear and evident than the particular Instances they are brought to confirm; but that being more familiar to the Mind, the very naming them is enough to satisfy the Understanding. But this, I say, is more from our Custom of using them, than the different Evidence of the Things. But before Custom has settled Methods of Thinking and Reasoning in our Minds, I am apt to imagine it is quite otherwise: and that the Child, when a part of his Apple is taken away, knows it better in that particular Instance, than by that general Proposition, *The Whole is equal to all its Parts*; and that if one of these have need to be confirmed to him by the other, the general has more need to be let into his Mind by the particular, than the particular by the general. For in particulars, our Knowledge begins, and so spreads it self, by degrees, to generals. Though afterwards, the Mind takes the quite contrary Course, and having drawn its Knowledge into as general Propositions as it can, makes those familiar to its Thoughts, and accustoms

accustoms it self to have recourse to them, as to the Standards of Truth and Falshood; by which familiar use of them, as Rules to measure the Truth of other Propositions, it comes in time to be thought, that more particular Propositions have their Truth and Evidence from their conformity to these more general ones, which in Discourse and Argumentation, are so frequently urged, and constantly admitted. And this I think to be the reason why amongst so many self-evident Propositions, the most general only have had the Title of Maxims.

§. 12. One thing farther, I think, it may not be amiss to observe concerning these general Maxims, That they are so far from improving or establishing our Minds in true Knowledge, that *if our Notions be wrong, loose, or unsteady*, and we resign up our Thoughts rather to the sound of Words, than to settled, clear, distinct *Ideas* of Things: I say, these *general Maxims*, will serve to confirm us in Mistakes; and in such a way of use of Words, which is most common, will serve to prove Contradictions: *v. g.* He that, with *Cartes*, shall frame in his Mind an *Idea* of what he calls *Body*, to be nothing but Extension, may easily demonstrate, that there is no *Vacuum*; *i. e.* no Space void of *Body*, by this Maxim, *What is, is*. For the *Idea* to which he annexes the name *Body*, being bare Extension, his Knowledge, that Space cannot be without *Body*, is certain. For he knows his own *Idea* of Extension clearly and distinctly, and knows that it is *what it is*, and not another *Idea*, though it be called by these three names, Extension, *Body*, Space; which three Words standing for one and the same *Idea*, may, no doubt, with the same evidence and certainty, be affirmed one of another, as each of it self: And it is as certain, that whilst I use them all to stand for one and the same *Idea*, this predication is as true and identical in its signification, that *Space is Body*, as this predication is true and identical, that *Body is Body*, both in signification and sound.

§. 13. But if another shall come and make to himself another *Idea* different from *Cartes*, of the thing, which yet, with *Cartes*, he calls by the same name *Body*, and make his *Idea*, which he expresses by the word *Body*, to consist of *Extension* and *Solidity* together, he will as easily demonstrate, that there may be a *Vacuum*, or Space, without a *Body*, as *Cartes* demonstrated the contrary, because the *Idea* to which he gives the name *Space*, being bare Extension, and the *Idea* to which he gives the name *Body*, being the complex *Idea* of Extension and Resistibility, or *Solidity* together; these two *Ideas* are not exactly one and the same, but in the Understanding as distinct as the *Ideas* of One and Two, White and Black, or as of *Corporeity* and *Humanity*, if I may use those barbarous terms: And therefore the predication of them in our Minds, or in Words standing for them is not identical, but the negation of them one of another, as certain and evident, as that it is impossible for the same thing to be, and not to be.

§. 14. But yet though both these Propositions (as you see) may be equally demonstrated, *viz.* That there may be a *Vacuum*, and that there cannot be a *Vacuum*, by these two certain Principles, (*viz.*) *What is, is*; and *the same thing cannot be, and not be*; yet neither of these Principles will serve to prove to us that any, or what Bodies do exist; for that we are left to our Senses to discover to us as far as they can: Those universal and self-evident Principles, being only our constant, clear, and distinct Knowledge of our own *Ideas* more general or comprehensive, can assure us of nothing that passes without the Mind, their certainty is founded only upon the Knowledge we have of each *Idea* by its self, and of its distinction from

from others; about which, we cannot be mistaken whilst they are in our Minds, though we may, and often are mistaken, when we retain the Names without the *Ideas*; or use them confusedly, sometimes for one, and sometimes for another *Idea*. In which cases, the force of these Axioms reaching only to the Sound, and not the Signification of the Words, serves only to lead us into Confusion, Mistake, and Errour.

§. 15. But let them be of what use they will in verbal Propositions, they cannot discover or prove to us the least Knowledge of the Nature of Substances, as they are found and exist without us, any farther than grounded on Experience. And though the consequence of these two Propositions, called Principles, be very clear, and their use not very dangerous, or hurtful, in the probation of such Things, wherein there is no need at all of them for proof, but such as are clear by themselves without them, *viz.* where our *Ideas* are clear and distinct, and known by the Names that stand for them; yet when these Principles, *viz.* *What is, is*; and, *It is impossible for the same thing to be, and not to be*, are made use of in the probation of Propositions, wherein are Words standing for complex *Ideas*; *v.g.* Man, Horse, Gold, Vertue; there they are of infinite danger, and most commonly make Men receive and retain Falshood for manifest Truth, and Uncertainty for Demonstration; upon which follows Errour, Obstinacy, and all the mischiefs that can happen from wrong reasoning. The reason whereof is not, that these Principles are less true in such Propositions, consisting of Words standing for complex *Ideas*, than in those of simple *Ideas*. But because Men mistake generally, thinking such Propositions to be about the reality of Things, and not the bare signification of Words, when indeed they are, for the most part, nothing else, as is clear in the demonstration of *Vacuum*, where the word *Body*, sometimes stands for one *Idea*, and sometimes for another: But shall be yet made more manifest.

§. 16. As for instance: Let *Man* be that, concerning which you would by these first Principles demonstrate any thing, and we shall see, that so far as demonstration is by these Principles, it is only verbal, and gives us no certain universal true Proposition, or knowledge of any Being existing without us. First, a Child having framed the *Idea* of a Man, it is probable; that his *Idea* is just like that picture, which the Painter makes of the visible appearances joined together; and such a complexion of *Ideas* together in his Understanding, makes up the single complex *Idea* which he calls *Man*, whereof White or Flesh-colour in *England* being one, the Child can demonstrate to you, that a *Negro* is not a Man, because White-colour was one of the constant simple *Ideas* of the complex *Idea* he calls *Man*; and therefore he can demonstrate by the Principle, *It is impossible for the same Thing to be, and not to be*, that a *Negro* is not a Man; the foundation of his Certainty being not that universal Proposition, which, perhaps, he never heard nor thought of, but the clear distinct perception he hath of his own simple *Ideas* of Black and White; which he cannot be persuaded to take, nor can ever mistake, one for another, whether he knows that Maxim, or no: And to this Child, or any one who hath such an *Idea* which he calls *Man*, Can you never demonstrate that a Man hath a Soul, because his *Idea* of *Man* includes no such Notion or *Idea* in it? And therefore to him, the Principle of *What is, is*, proves not this matter; but it depends upon Collection and Observation, by which he is to make his complex *Idea* called *Man*.

§. 17. *Secondly*, Another that hath gone farther in framing and collecting the *Idea* he calls *Man*, and to the outward Shape adds Laughter, and rational Discourse, may demonstrate, that Infants and Changelings are no Men, by this Maxim, *It is impossible for the same Thing to be, and not to be*: And I have discoursed with very rational Men, who have actually denied that they are Men.

§. 18. *Thirdly*, Perhaps, another makes us the complex *Idea* which he calls *Man*, only out of the *Ideas* of Body in general, and the Powers of Language and Reason, and leaves out the Shape wholly: This Man is able to demonstrate, that a Man may have no Hands, but be *Quadrupes*, neither of those being included in his *Idea* of *Man*; and in whatever Body or Shape he found Speech and Reason join'd, that was a Man: because having a clear knowledge of such a complex *Idea*, it is certain, that *What is, is*.

§. 19. So that, if rightly considered, I think we may say, that *where our Ideas are clear and distinct, and the Names agreed on*, that shall stand for each clear and distinct *Idea*, there is little need, or no use at all of these *Maxims*, to prove the agreement, or disagreement of any of them. He that cannot discern the Truth or Falshood of such Propositions, without the help of these, and the like *Maxims*, will not be helped by these *Maxims* to do it: since he cannot be supposed to know the Truth of these *Maxims* themselves without proof, if he cannot know the Truth of others without proof, which are as self-evident as these. And upon the very same grounds, intuitive Knowledge neither requires nor admits any proof, one part of it more than another: He that will suppose it, does take away the foundation of all Knowledge, and Certainty: And he that needs any proof to make him certain, and give his Assent to this Proposition, that Two is equal to Two, will also have need of a proof to make him admit, that *What is, is*. He that needs a probation to convince him, that Two is not Three, that White is not Black, that a Triangle is not a Circle, &c. or any other two clear distinct *Ideas* are not one and the same, will need also a demonstration to convince him, that *it is impossible for the same thing to be, and not to be*.

§. 20. And as these *Maxims* are of little use, where we have clear and distinct *Ideas*, so they are, as I have shewed, of dangerous use, where our *Ideas* are not clear and distinct; and where we use Words that are not annexed to clear and distinct *Ideas*, but to such as are of a loose and wandering signification, sometimes standing for one, and sometimes for another *Idea*; from which follows mistake and error, which these *Maxims* (brought as proofs to establish Propositions, wherein the terms stand for confused or uncertain *Ideas*) do by their Authority confirm and rivet.

C H A P. VIII.

Of Trifling Propositions.

§. 1. **W**Hether the Maxims treated of in the fore-going Chapter, be of that use to real Knowledge, as is generally supposed, I leave to be considered. This, I think, may confidently be affirmed, That there are universal Propositions; that though they be certainly true, yet they add no light to our Understandings, bring no increase to our Knowledge. Such are,

§. 2. *First, All purely identical Propositions.* These obviously, and at first blush, appear to contain no Instruction in them. For when we affirm the same term of it self, whether it be barely verbal, or whether it contains any clear and real *Idea*, it shews us nothing, but what we must certainly know before, whether such a Proposition be either made by, or proposed to us. Indeed, that most general one, *What is, is*, may serve sometimes to shew a Man the absurdity he is guilty of, when by circumlocution, or equivocal terms, he would, in particular instances, deny the same thing of it self; because no body will so openly bid defiance to common sense, as to affirm visible and direct Contradictions in plain Words: Or if he does, a Man is excused if he break off any farther discourse with him. But yet, I think, I may say, that neither that received Maxim, nor any other identical Proposition, teaches us any thing: And though in such kind of Propositions, this great and magnified Maxim, boasted to be the foundation of Demonstration, may be, and often is made use of to confirm them; yet all it proves, amounts to no more than this, That the same Word may with great certainty be affirmed of it self, without any doubt of the Truth of any such Proposition; and let me add also, without any real Knowledge.

§. 3. For at this rate, any very ignorant person, who can but make a Proposition, and knows what he means when he says Ay, or No, may make a million of Propositions, of whose Truth he may be infallibly certain, and yet not know one thing in the World thereby; *v.g.* what is a Soul, is a Soul; or a Soul, is a Soul; a Spirit, is a Spirit; a Fetiche, is a Fetiche, &c. These all being equivalent to this Proposition, *viz. What is, is*, i. e. what hath Existence, hath Existence; or who hath a Soul, hath a Soul. What is this more than trifling with Words? It is but like a Monkey shifting his Oyster from one hand to the other; and had he had but Words, might, no doubt, have said, Oyster in right hand is subject, and Oyster in left hand is predicate: and so might have made a self-evident Proposition of Oyster, *i. e.* Oyster is Oyster; and yet, with all this, not have been one whit the wiser, or more knowing: and that way of handling the matter, would much at one have satisfied the Monkey's Hunger, or a Man's Understanding; and they would have improved in Knowledge and bulk together.

§. 4. *Secondly,* Another sort of trifling Propositions is, when a part of the complex Idea is predicated of the Name of the whole; a part of the definition of the Word defined. Such are all Propositions wherein the Genus is predicated of the Species, or more comprehensive of less comprehensive terms: For what Information, what Knowledge carries this Pre-

position in it, viz. *Lead is a Metal*, to a Man, who knows the complex *Idea* the name *Lead* stands for. All the simple *Ideas* that go to the complex one, signified by the term *Metal*, being nothing but what he before comprehended and signified by the name *Lead*. Indeed, to a Man that knows the signification of the word *Metal*, and not of the word *Lead*, it is a shorter way to explain the signification of the word *Lead*, by saying it is a *Metal*, which at once expresses several of its simple *Ideas*, than to enumerate them one by one, telling him it is a *Body* very heavy, fusible, and malleable.

§ 5. Alike trifling it is, to predicate any other part of the Definition of the Term defined, or to affirm any one of the simple *Ideas* of a complex one, of the name of the whole complex *Idea*; as all *Gold* is fusible: For Fusibility being one of the simple *Ideas* that goes to the making up the complex one the sound *Gold* stands for, what can it be but playing with Sounds, by affirming that of the name *Gold*, which is comprehended in its received signification. 'Twould be thought little better than ridiculous, to affirm gravely as a Truth of moment, that *Gold* is yellow; and I see not how it is any jot more material, to say, It is fusible, unless that *Quality* be left out of the complex *Idea*, of which the sound *Gold* is the mark in ordinary speech. What Instruction can it carry with it, to tell one that, which he hath been told already, or he is supposed to know before: For I am supposed to know the signification of the Word another uses to me, or else he is to tell me. And if I know that the name *Gold* stands for this complex *Idea* of *Body, Yellow, Heavy, Fusible, Malleable*, 'twill not much instruct me to put it solemnly afterwards in a Proposition, and gravely say, *All Gold is fusible*. Such Propositions can only serve to shew the dissingenuity of one, who will go from the definition of his own Terms, by re-minding him sometimes of it; but carry no Knowledge with them, but of the signification of Words, however certain they be.

§ 6. Every *Man* is an Animal, or living Body, is as certain a Proposition as can be; but no more conducing to the Knowledge of Things, than to say a *Palfry* is an ambling Horse, or a neighing ambling Animal, both being only about the signification of Words, and make me know but this; That *Body, Sense, and Motion*, or power of Sensation and Moving, are three of those simple *Ideas* that I always comprehend and signify by the word *Man*; and where they are not to be found together, the name *Man* belongs not to that Thing: And so of the other, that *Body, Sense, and Motion*, and a certain way of going, with a certain kind of Voice, are some of those simple *Ideas* which I always comprehend, and signify by the word *Palfry*; and when they are not to be found together, the name *Palfry* belongs not to that thing. 'Tis just the same, and to the same purpose, when any term standing for any one or more of the simple *Ideas*, that altogether make up that complex *Idea* which is called a *Man*, is affirmed of the term *Man*: v. g. suppose a *Roman*, signified by the word *Homo*: all these distinct *Ideas* united in one subject, *Corporeitas, Sensibilitas, Potentia se movendi, Rationalitas, Risibilitas*, he might, no doubt, with great certainty, universally affirm one more, or all of these together of the word *Homo*, but did no more than say, that the word *Homo*, in his Country, comprehended in its signification, all these *Ideas*. Much like a *Romance Knight*, who by the word *Palfry*, signified these *Ideas*; *Body* of a certain figure, four-legg'd, with sense, motion, ambling, neighing, white, used to have a Woman on his back, might, with the same certainty, universally affirm also any or all of these of the word *Palfry*: but did thereby teach no more, but that the word *Palfry*, in his, or Ro-

mance-

mance-Language, stood for all these, and was not to be applied to any thing, where any of these was wanting. But he that shall tell me, that in whatever thing *Sense*, *Motion*, *Reason*, and *Laughter*, were united, that Thing had actually a notion of GOD, or would be cast into a sleep by *Opium*, made indeed an instructive Proposition: because neither having the notion of GOD, nor being cast into sleep by *Opium*, being contained in the *Idea* signified by the word *Man*, we are by such Propositions taught something more than barely what the word *Man* stands for: And therefore the Knowledge contained in it, is more than verbal.

§. 7. Before a Man makes any Proposition, he is supposed to understand the terms he uses in it, or else he talks like a Parrot, only making a noise by imitation, and framing certain Sounds he has learnt of others; but not, as a rational Creature, using them for signs of *Ideas* he has in his Mind. The Hearer also is supposed to understand the Terms as the Speaker uses them, or else he talks jargon, and makes an unintelligible noise. And therefore he trifles with Words, who makes such a Proposition, which when it is made, contains no more than one of the Terms does, and which a Man was supposed to know before: *v. g.* a Triangle hath three sides, or Saffron is yellow. And this is no farther tolerable, than where a Man goes to explain his Terms, to one who is supposed or declares himself not to understand him: and then it teaches only the *signification of that Word*, and the use of that Sign.

§. 8. We can know then the Truth of two sorts of Propositions, with perfect certainty; the one is, of those trifling Propositions, which have a certainty in them, but 'tis but a *verbal Certainty*, but not instructive. And, secondly, we can know the Truth, and so may be certain in Propositions, which affirm something of another, which is a necessary consequence of its precise complex *Idea*, but not contained in it. As that the external Angle of all Triangles, is bigger than either of the opposite internal Angles; which relation of the outward Angle, to either of the opposite internal Angles, making no part of the complex *Idea*, signified by the name Triangle, this is a real Truth, and conveys with it instructive real Knowledge.

§. 9. We having no knowledge of what Combinations there be of simple *Ideas* existing together in Substances, but by our Senses, we cannot make any universal certain Propositions concerning them, any farther than our nominal Essences lead us: which being to a very few and inconsiderable Truths, in respect of those which depend on their real Constitutions, the general Propositions that are made about Substances, if they are certain, are for the most part but trifling; and if they are instructive, are uncertain, and such as we can have no knowledge of their real Truth, how much soever constant Observation and Analogy may assist our Judgments in guessing. Hence it comes to pass, that one may often meet with very clear and coherent Discourses, that amount yet to nothing. For 'tis plain, that Names of substantial Beings, as well as others, having constant and settled significations affixed to them, may, with great truth, be joined negatively and affirmatively in Propositions, as their Definitions make them fit to be so joined; and Propositions consisting of such Terms, may, with the same clearness, be deduced one from another, as those that convey the most real Truths; and all this, without any knowledge of the Nature or Reality of Things existing without us. By this method, one may make Demonstrations and undoubted Propositions in Words, and yet thereby advance not one jot in the Knowledge of the Truth of Things; *v. g.* he that having learnt these following Words,

Words, with their ordinary Acceptations annexed to them; *v. g.* Substance, Man, Animal, Form, Soul, Vegetative, Sensitive, Rational, may make several undoubted Propositions about the Soul, without knowing at all what the Soul really is; and of this sort, a Man may find an infinite number of Propositions, Reasonings, and Conclusions, in Books of Metaphysics, School-Divinity, and some sort of natural Philosophy; and after all, know as little of GOD, Spirits, or Bodies, as he did before he set out.

§. 10. He that hath liberty to define, *i. e.* determine the signification of his Names of Substances, (as certainly every ones does in effect, who makes them stand for his own *Ideas*;) and makes their Significations at a venture, taking them from his own or other Men's Fancies, and not from an Examination and Enquiry into the Nature of Things themselves, may, with little trouble, demonstrate them one of another; wherein, however Things agree, or disagree, in their own Nature, he need mind nothing but his own Notions, with the Names he hath bestowed upon them: but thereby no more increases his own Knowledge, than he does his Riches, who taking a Bag of Counters, calls one in a certain place a Pound, another in another place, a Shilling, and a third in a third place, a Penny; and so proceeding, may undoubtedly reckon right, and cast up a great sum, according to his Counters so placed, and standing for more or less as he pleases, without being one jot the richer, or without even knowing how much a Pound, Shilling, or Penny is, but only that one is contained in the other twenty times, and contains the other twelve; which a Man may also do in the signification of Words, by making them in respect of one another, more, or less, or equally comprehensive.

§. 11. Though yet concerning most Words used in Discourses, especially Argumentative and Controversial, there is this more to be complained of, which is the worst sort of *Trifling*, and which sets us yet farther from the certainty of Knowledge we hope to attain by them, or find in them, *viz.* that most Writers are so far from instructing us in the Nature and Knowledge of Things, that they *use their Words loosely* and uncertainly, and do not, by using them constantly and steddily in the same signification, make plain and clear deductions of Words one from another, and make their Discourses coherent and clear; (how little soever it were instructive,) which were not difficult to do, did they not find it convenient to shelter their Ignorance or Obstinacy, under the obscurity and perplexedness of their Terms; to which, perhaps, Inadvertency, and ill Custom does in many Men much contribute.

§. 12. To conclude, *barely verbal Propositions* may be known by these following Marks:

First, All Propositions, wherein two abstract Terms are affirmed one of another, are barely about the signification of Sounds. For since no abstract *Idea* can be the same with any other but its self, when its abstract Name is affirmed of any other Term, it can signify no more but this, that it may, or ought to be called by that Name; or that these two Names signify the same *Idea*. Thus should any one say, that Parsimony is Frugality, that Gratitude is Justice; that this or that Action is, or is not Temperance: However specious these and the like Propositions may at first sight seem, yet when we come to press them, and examine nicely what they contain, we shall find, that it all amounts to nothing, but the signification of those Terms.

§. 13. Secondly, All Propositions, wherein a part of the complex Idea, which any Term stands for, is predicated of that Term, are only verbal, v. g. to say, that Gold is a Metal, or heavy. And thus all Propositions, wherein more comprehensive Words, called *Genera*, are affirmed of subordinate, or less comprehensive, called *Species*, or *Individuals*, are barely verbal.

When by these two Rules, we have examined the Propositions, that make up the Discourses we ordinarily meet with, both in and out of Books, we shall, perhaps, find that a greater part of them, than is usually suspected, are purely about the signification of Words, and contain nothing in them, but the Use and Application of these Signs.

This, I think, I may lay down for an infallible Rule, that where-ever the distinct *Idea* any Words stand for, is not known and considered, and something not contained in that *Idea*, is not affirmed, or denied of it, there our Thoughts stick wholly in Sounds, and are able to attain no real Truth or Falshood. This, perhaps, if well heeded, might save us a great deal of useless Amusement and Dispute; and very much shorten our trouble, and wandering in the search of real and true Knowledge.

CHAP. IX.

Of our Knowledge of Existence.

§. 1. **H**itherto we have only considered the Essences of Things, which being only abstract *Ideas*, and thereby removed in our Thoughts from particular Existence, (that being the proper Operation of the Mind, in Abstraction, to consider an *Idea* under no other Existence, but what it has in the Understanding,) gives us no Knowledge of real Existence at all. Where by the way we take notice, that *universal Propositions*, of whose Truth or Falshood we can have certain Knowledge, concern not Existence; and farther, that all particular Affirmations or Negations, that would not be certain if they were made general, are only concerning Existence; they declaring only the accidental Union or Separation of *Ideas* in Things existing, which in their abstract Natures, have no known necessary Union or Repugnancy.

§. 2. But leaving the Nature of Propositions, and different ways of Predication to be considered more at large in another place, Let us proceed now to enquire concerning our Knowledge of the Existence of Things, and how we come by it. I say then, that we have the Knowledge of our own Existence by Intuition; of the Existence of God by Demonstration; and of other Things by Sensation.

§. 3. As for our own Existence, we perceive it so plainly, and so certainly, that it neither needs, nor is capable of any proof. For nothing can be more evident to us, than our own Existence. I think, I reason, I feel Pleasure and Pain; Can any of these be more evident to me, than my own Existence? If I doubt of all other Things, that very doubt makes me perceive my own Existence, and will not suffer me to doubt of that. For if I know I feel Pain, it is evident, I have as certain a Perception of my own Existence, as of the Existence of the Pain I feel: Or if I know I doubt, I have as certain a Perception of the Existence of the thing doubting, as of that Thought, which I call doubt. Experience then convinces us, that we have an intuitive Knowledge of our own Existence, and an internal

nal infallible Perception that weare. In every Act of Sensation, Reasoning or Thinking, we are conscious to our selves of our own Being; and in this Matter, come not short of the highest degree of Certainty.

C H A P. X.

Of our Knowledge of the Existence of a GOD.

§. 1. **T**Hough God has given us no innate *Ideas* of himself; though he has stamped no original Characters in our Minds, wherein we may read his Being: yet having furnished us with those Faculties, our Minds are endowed with, he hath not left himself without witnesses: since we have Sense, Perception, and Reason, and cannot want a clear proof of him, as long as we carry our selves about us. Nor can we justly complain of our Ignorance in this great Point, since he has so plentifully provided us with the means to discover, and know him, so far as is necessary to the end of our Being, and the great concernment of our Happiness. But though this be the most obvious Truth that Reason discovers; and though its Evidence be (if I mistake not) equal to mathematical Certainty: yet it requires Thought and Attention; and the Mind must apply its self to a regular deduction of it from some unquestionable parts of our Knowledge, or else we shall be as uncertain, and ignorant of this, as of other Propositions, which are in themselves capable of clear Demonstration. To shew therefore, that *we are capable of knowing, certainly knowing that there is a God*, and how we come by it, I think we need look no farther than our selves, and that undoubted Knowledge we have of our own Existence.

§. 2. I think it is beyond Question, that *Man has a clear Perception of his own Being*; he knows certainly, that he exists, and that he ~~is~~ something. He that can doubt, whether he be any thing, or no, I speak not to, no more than I would argue with pure nothing; or endeavour to convince Non-entity, that it ~~was~~ were something. If any one pretend to be so sceptical, as to deny his own Existence, (for really to doubt of it, is manifestly impossible,) let him for me enjoy his beloved Happiness of being nothing, until Hunger, or some other Pain convince him of the contrary. This then, I think, I may take for a Truth, which every ones certain Knowledge assures him of, beyond the liberty of doubting, *viz.* that he is something that actually exists.

§. 3. In the next place, Man knows by an intuitive Certainty, that *nothing can no more produce any real Being, than it can be equal to two right Angles*. If a Man knows not that Non-entity, or the Absence of all Being cannot be equal to two right Angles, it is impossible he should know any demonstration in *Euclid*. If therefore we know there is some real Being, and that Non-entity cannot produce any real Being, it is an evident demonstration, that from Eternity there has been something. Since what was not from Eternity, had a Beginning; and what had a Beginning, must be produced by something else.

§. 4. Next, it is evident, that what had its Being and Beginning from another, must also have all that which is in, and belongs to its Being from another too. All the Powers it has, must be owing to, and received from the same Source. This eternal Source then of all being must also be the Source and Original of all Power; and so *this eternal Being must be also the most powerful*.

§. 5. Again, a Man finds in himself Perception, and Knowledge. We have then got one step farther; and we are certain now, that there is not only some Being, but some knowing intelligent Being in the World.

There was a time then, when there was no knowing Being, and when Knowledge began to be; or else, there has been also a *knowing Being from Eternity*. If it be said, there was a time when no Being had any Knowledge, when that eternal Being was void of all Understanding. I reply, that then it was impossible there should ever have been any Knowledge. It being as impossible, that Things wholly void of Knowledge, and operating blindly, and without any Perception, should produce a knowing Being, as it is impossible, that a Triangle should make it self three Angles bigger than two right ones. For it is as repugnant to the *Idea* of senseless Matter, that it should put into it self Sense, Perception, and Knowledge, as it is repugnant to the *Idea* of a Triangle, that it should put into it self greater Angles than two right ones.

§. 6. Thus from the Consideration of our selves, and what we infallibly find in our own Constitutions, our Reason leads us to the Knowledge of this certain and evident Truth, That *there is an eternal, most powerful, and most knowing Being*; which whether any one will please to call God, it matters not. The thing is evident, and from this *Idea* duly considered, will easily be deduced all those other Attributes, we ought to ascribe to this eternal Being.

From what has been said, it is plain to me, we have a more certain Knowledge of the Existence of a GOD, than of any thing our Senses have not immediately discovered to us. Nay, I presume I may say, that we more certainly know that there is a GOD, than that there is any thing else without us. When I say we *know*, I mean there is such a Knowledge within our reach, which we cannot miss, if we will but apply our Minds to that, as we do to several other Enquiries.

§. 7. *How far the Ideas of a most perfect Being, which a Man may frame in his Mind, does, or does not prove the Existence of a God, I will not here examine.* For in the different Make of Men's Tempers, and Application of their Thoughts, some Arguments prevail more on one, and some on another, for the Confirmation of the same Truth. But yet, I think, this I may say, that it is an ill way of establishing this Truth, and silencing Atheists, to lay the whole stress of so important a Point, as this, upon that sole Foundation: and take some Men's having that *Idea* of God in their Minds, (for 'tis evident, some Men have none, and some worse than none, and the most very different,) for the only proof of a Deity; and out of an over fondness of that Darling Invention, cashier, or at least endeavour to invalidate all other Arguments, and forbid us to hearken to those proofs, as being weak, or fallacious, which our own Existence, and the sensible parts of the Universe, offer so clearly, and cogently to our Thoughts, that I deem it impossible for a considering Man to withstand them. For I judge it as certain and clear a Truth, as can any where be delivered, That the invisible Things of God, are clearly seen from the Creation of the World, being understood by the Things that are made, even his Eternal Power, and God-head. Though our own Being furnishes us, as I have shewn, with an evident, and incontestable proof of a Deity. And I believe no Body can avoid the Cogency of it, who will but as carefully attend to it, as to any other Demonstration of so many parts: yet this being so fundamental a Truth, and of that Consequence, that all Religion and genuine Morality depend thereon, I doubt not but

I shall be forgiven by my Reader, if I go over some parts of this Argument again, and enlarge a little more upon them.

§. 8. There is no Truth more evident, than that *something* must be from *Eternity*. I never yet heard of any one so unreasonable, or that could suppose so manifest a Contradiction, as a Time, wherein there was perfectly nothing. This being of all Absurdities the greatest, to imagine that pure nothing, the perfect Negation and Absence of all Beings, should ever produce any real Existence.

It being then unavoidable for all rational Creatures, to conclude, that something has existed from Eternity. Let us next see what kind of thing that must be.

§. 9. There are but two sorts of Beings in the World, that Man knows or conceives.

First, Such as are purely material, without Sense, Perception, or Thought, as the clippings of our Beards, and paring of our Nails.

Secondly, Sensible, thinking, perceiving Beings, such as we find our selves to be, which if you please, we will hereafter call *cogitative and incogitative* Beings; which to our present purpose, if for nothing else, are, perhaps, better Terms, than material and immaterial.

§. 10. If then there must be something eternal, let us see what sort of Being it must be. And to that, it is very obvious to Reason, that it must necessarily be a cogitative Being. For it is as impossible to conceive, that ever bare incogitative Matter should produce a thinking intelligent Being, as that nothing should of it self produce Matter. Let us suppose any part of Matter eternal, great or small, we shall find it, in it self, able to produce nothing. For Example; let us suppose the Matter of the next Pebble, we meet with, eternal, closely united, and the parts firmly at rest together, if there were no other Being in the World, Must it not eternally remain so, a dead inactive Lump? Is it possible to conceive it can add Motion to it self, being purely Matter, or produce any thing? Matter then, by its own Strength, cannot produce in it self so much as Motion: the Motion it has, must also be from Eternity, or else be produced, and added to Matter by some other Being more powerful than Matter; Matter, as is evident, having not Power to produce Motion in it self. But let us suppose Motion eternal too; yet Matter, *incogitative Matter* and Motion, whatever changes it might produce of Figure and Bulk, could never produce Thought: Knowledge will still be as far beyond the Power of Motion and Matter to produce, as Matter is beyond the Power of nothing to produce. And I appeal to every one's own Thoughts, whether he cannot as easily conceive Matter produced by nothing, as Thought to be produced by pure Matter, when before there was no such thing as Thought, or an intelligent Being existing. Divide Matter into as minute parts as you will, (which we are apt to imagine a sort of spiritualizing, or making a thinking thing of it,) vary the Figure and Motion of it, as much as you please, a Globe, Cube,

Cone, Prism, Cylinder, &c. whose Diametres are but 1000000th part of a Gry (α) will operate no otherwise upon other Bodies of proportionable Bulk, than those of an inch or foot Diametre; and you may as rationally expect to produce Sense, Thought, and Knowledge, by putting together in a certain Figure and Motion gross Particles of Matter, as by those that are the very minutest, that do any where exist. They knock, impell, and resist one another, just as the greater do, and that is all they can do. So that
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(a) A Gry is $\frac{1}{1000000}$ of a line, a line $\frac{1}{10}$ of an inch, an inch $\frac{1}{10}$ of a philosophical foot, a philosophical foot $\frac{1}{2}$ of a pendulum, whose Diadroms, in the latitude of 45 degrees, are each equal to one Second of time, or $\frac{1}{60}$ of a minute. I have affectedly made use of this measure here, and the parts of it, under a decimal division with names to them; because, I think, it would be of general convenience, that this should be the common measure in the Commonwealth of Letters.

if we will suppose nothing first, or eternal, Matter can never begin to be: If we suppose bare Matter, without Motion, eternal, Motion can never begin to be: If we suppose only Matter and Motion first, or eternal, Thought can never begin to be. Whatsoever therefore is eternal, must be a cogitative Being, a Spirit: Whatsoever is first of all Things, must necessarily contain in it, and actually have, at least, all the Perfections that can ever after exist: nor can it ever give to another any perfection that it hath not, either actually in it self, or at least in a higher degree.

§. 11. If therefore it be evident, that *something* necessarily must exist from Eternity, 'tis also as evident, that *that Something* must necessarily be a cogitative Being: For it is as impossible, that incogitative Matter should produce a cogitative Being, as that nothing, or the negation of all Being, should produce a positive Being, or Matter.

§. 12. Though this discovery of the *necessary Existence of an eternal Mind*, do sufficiently lead us into the Knowledge of a GOD; since it will hence follow, that all other knowing Beings that have a beginning, must depend on him, and have no other ways of Knowledge, or extent of Power, than what he gives them: and therefore if he made those, he made also the less-excellent pieces of this Universe, all inanimate Beings, whereby his Omniscience, Power, and Providence, will be established, and all his other Attributes necessarily follow: yet to clear up this a little farther, we will see what Doubts can be raised against it.

§. 13. *First*, Perhaps it will be said, that though it be as clear as demonstration can make it, that there must be an eternal Being, and that Being must also be knowing: Yet it does not follow, but that thinking Being may also be material. Let it be so, it equally still follows, that there is a GOD. For if there be an Eternal, Omniscient, Omnipotent Being, it is certain, that there is a GOD, whether you imagine that Being to be material, or no. But herein, I suppose, lies the danger and deceit of that Supposition: There being no way to avoid the demonstration, that there is an eternal knowing Being, Men, devoted to Matter, would willingly have it granted, that this knowing Being is material; and then letting slide out of their Minds, or the Discourse, the demonstration whereby an eternal knowing Being was proved necessarily to exist, would argue all to be Matter, and so deny a GOD, that is, an eternal cogitative Being: whereby they are so far from establishing, that they destroy their own Hypothesis. For if there can be, in their Opinion, eternal Matter, without an eternal cogitative Being, they manifestly separate Matter and Thinking, and suppose no necessary connexion of the one with the other, and so establish the necessity of an eternal Spirit, but not of Matter; since it has been proved already, that an eternal cogitative Being, is unavoidably to be granted. Now if Thinking and Matter may be separated, the eternal Existence of Matter, will not follow from the eternal Existence of a cogitative Being, and they suppose it to no purpose.

§. 14. But now let us see how they can satisfy themselves, or others, that this eternal thinking Being is material.

First, I would ask them, Whether they imagine, that all Matter, every particle of Matter, thinks? This, I suppose, they will scarce say; since then there would be as many eternal thinking Beings, as there are Particles of Matter, and so an infinity of Gods. And yet if they will not allow Matter as Matter; that is, every Particle of Matter to be as well cogitative, as extended, they will have as hard a task to make out to their own Reasons, cogitative Being out of incogitative Particles, as an extended Being, out of unextended Parts, if I may so speak.

§. 15. *Secondly*, If all Matter do not think, I next ask, Whether it be only one Atom that does so? This has as many Absurdities as the other; for then this Atom of Matter, must be alone eternal, or not. If this alone be eternal, then this alone, by its powerful Thought, or Will, made all the rest of Matter. And so we have the creation of Matter by a powerful Thought, which is that the Materialists stick at. For if they suppose one single thinking Atom, to have produced all the rest of Matter, they cannot ascribe that Pre-eminency to it upon any other account, than that of its Thinking, the only supposed difference. But allow it to be by some other way, which is above our conception, it must be still Creation; and these Men must give up their great Maxim, *Ex nihilo nil fit*. If it be said, that all the rest of Matter is equally eternal, as that thinking Atom, it will be to say any thing at pleasure, though never so absurd: For to suppose all Matter eternal, and yet one small particle in Knowledge and Power infinitely above all the rest, is without any the least appearance of Reason to frame any Hypothesis: Every particle of Matter, as Matter, is capable of all the same Figures and Motions of any other; and I challenge any one in his Thoughts, to add any Thing else to one above another.

§. 16. *Thirdly*, If then neither one peculiar Atom alone, can be this eternal thinking Being; nor all Matter, as Matter; *i. e.* every particle of Matter can be it, it only remains, that it is some certain System of Matter duly put together; that is this *thinking eternal Being*. This is that which, I imagine, is that Notion which Men are aptest to have of GOD, who would have him a material Being, as most readily suggested to them, by the ordinary conceit they have of themselves, and other Men, which they take to be material thinking Beings. But this Imagination, however more natural, is no less absurd than the other: For to suppose the eternal thinking Being, to be nothing else but a composition of Particles of Matter, each whereof is incogitative, is to ascribe all the Wisdom and Knowledge of that eternal Being, only to the *juxta*-position of parts; than which, nothing can be more absurd. For unthinking Particles of Matter, however put together, can have nothing thereby added to them, but a new relation of Position, which 'tis impossible should give thought and knowledge to them.

§. 17. But farther, this *corporeal System* either has all its parts at rest, or it is a certain motion of the parts wherein its Thinking consists. If it be perfectly at rest, it is but one lump, and so can have no privileges above one Atom.

If it be the motion of its parts, on which its Thinking depends, all the Thoughts there must be unavoidably accidental, and limited; since all the Particles that by Motion cause Thought, being each of them in it self without any Thought, cannot regulate its own Motions, much less be regulated by the Thought of the whole; since that Thought is not the cause of Motion, (for then it must be antecedent to it, and so without it,) but the consequence of it, whereby Freedom, Power, Choice, and all rational and wise thinking or acting, will be quite taken away: So that such a thinking Being, will be no better nor wiser, than pure blind Matter; since to resolve all into the accidental unguided motions of blind Matter, or into Thought depending on unguided motions of blind Matter, is the same thing; not to mention the narrowness of such Thoughts and Knowledge, that must depend on the motion of such parts. But there needs no enumeration of any more Absurdities and Impossibilities in this Hypothesis, (however full of them it be,) than that before-mentioned; since let this thinking System be all, or a part of the Matter of the Universe, it is impossible that any one Particle, should either
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know its own, or the motion of any other Particle, or the Whole know the motion of every Particular; and so regulate its own Thoughts or Motions, or indeed have any Thought resulting from such Motion.

§. 18. Others would have *Matter* to be *eternal*, notwithstanding that they allow an eternal, cogitative, immaterial Being. This, tho' it take not away the Being of a *God*, yet since it denies one and the first great piece of his Workmanship, the Creation, let us consider it a little. *Matter* must be allow'd eternal: Why? Because you cannot conceive how it can be made out of nothing, why do you not also think your self eternal? You will answer, perhaps, Because about twenty or forty years since, you began to be. But if I ask you, what that *You* is, which began to be, you can scarce tell me. The *Matter* whereof you are made, began not then to be: for if it did, then it is not eternal: But it began to be put together in such a fashion and frame, as makes up your Body; but yet that frame of Particles is not You, it makes not that thinking Thing You are; (for I have now to do with one, who allows an eternal, immaterial, thinking Being, but would have unthinking *Matter* eternal too;) therefore when did that thinking Thing begin to be? If it did never begin to be, then have you always been a thinking Thing from Eternity; the absurdity whereof I need not confute, till I meet with one who is so void of Understanding, as to own it. If therefore you can allow a thinking Thing, to be made out of nothing, (as all Things that are not eternal must be,) why also can you not allow it possible, for a material Being to be made out of nothing, by an equal Power, but that you have the experience of the one in view, and not of the other? Though, when well considered, Creation of one, as well as t'other, requires an equal Power: And we have no more reason to boggle at the effect of that Power in one, than in the other; because the manner of it in both, is equally beyond our comprehension. For the Creation, or beginning of any one thing out of nothing, being once admitted, the Creation of every thing else, but the CREATOR Himself, may, with the same ease, be supposed.

§. 19. But you will say, Is it not impossible to admit of the making any thing out of nothing, since we cannot possibly conceive it? I answer, No: 1. Because it is not reasonable to deny the power of an infinite Being, because we cannot comprehend its Operations. We do not deny other effects upon this ground, because we cannot possibly conceive their Production, we cannot conceive how Thought (or any thing but motion in Body) can move Body: and yet that is not a Reason sufficient to make us deny it possible, against the constant Experience we have of it in our selves, in all our voluntary Motions which are produced in us, only by the free Thoughts of our own Minds; and are not, nor cannot be the effects of the impulse or determination of the motion of blind *Matter*, in or upon our Bodies; for then it could not be in our power or choice to alter it. For example: My right Hand writes, whilst my left Hand is still: What causes rest in one, and motion in the other? Nothing but my Will, a Thought of my Mind; my Thought only changing, the right Hand rests and the left Hand moves. This is matter of fact, which cannot be denied: Explain this, and make it intelligible, and then the next step will be to understand Creation. In the mean time, 'tis an overvaluing our selves, to reduce all to the narrow measure of our Capacities; and to conclude, all things impossible to be done, whose manner of doing exceeds our Comprehension. This is to make our Comprehension infinite, or GOD finite; when what he can do, is limited to what we can conceive of it. If you do not understand the Operations of your own finite Mind,

Mind, that thinking Thing within you, do not deem it strange, that you cannot comprehend the Operations of that eternal infinite Mind, who made and governs all Things, and whom the Heaven of Heavens cannot contain.

C H A P. XI.

Of our Knowledge of the Existence of other Things.

§. 1. **T**He Knowledge of our own Being, we have by intuition. The Existence of a GOD, Reason clearly makes known to us, as has been shewn.

The Knowledge of the Existence of any other thing, we can have only by Sensation: For there being no necessary connexion of real Existence, with any *Idea* a Man hath in his Memory, nor of any other Existence but that of GOD, with the Existence of any particular Man; no particular Man can know the Existence of any other Being, but only when by actual operating upon him, it makes it self perceived by him. For the having the *Idea* of any thing in our Mind, no more proves the Existence of that Thing, than the picture of a Man evidences his being in the World, or the Visions of a Dream make thereby a true History.

§. 2. 'Tis therefore the actual receiving of *Ideas* from without, that gives us notice of the Existence of other Things, and makes us know, that something doth exist at that time without us, which causes that *Idea* in us, though perhaps we neither know nor consider how it does it: For it takes not from the certainty of our Senses, and the *Ideas* we receive by them, that we know not the manner wherein they are produced: *v. g.* whilst I write this, I have, by the Paper affecting my Eyes, that *Idea* produced in my Mind; which whatever Object causes, I call *White*; by which I know, that that Quality or Accident (*i. e.* whose appearance before my Eyes, always causes that *Idea*) doth really exist, and hath a Being without me. And of this, the greatest assurance I can possibly have, and to which my Faculties can attain, is the Testimony of my Eyes, which are the proper and sole Judges of this thing, and whose Testimony I have reason to rely on, as so certain, that I can no more doubt, whilst I write this, that I see White and Black, and that something really exists, that causes that Sensation in me, than that I write or move my Hand; which is a Certainty as great, as humane Nature is capable of, concerning the Existence of any Thing, but a Man's self alone, and of GOD.

§. 3. The notice we have by our Senses, of the existing of Things without us, though it be not altogether so certain, as our intuitive Knowledge, or the Deductions of our Reason, employ'd about the clear abstract *Ideas* of our own Minds; yet it is an assurance that deserves the name of Knowledge, if we persuade our selves, that our Faculties act and inform us right, concerning the existence of those Objects that affect them, it cannot pass for an ill-grounded confidence. For I think nobody can, in earnest, be so sceptical, as to be uncertain of the Existence of those Things he sees and feels. At least, he that can doubt so far, (whatever he may have with his own Thoughts) will never have any Controversies with me; since he can never be sure I say any thing contrary to his Opinion.

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As to my self, I think GOD has given me assurance enough of the Existence of Things without me: since by their different application, I can produce in my self both Pleasure and Pain, which is one great Concernment of my present state. This is certain, the confidence that our Faculties do not herein deceive us, is the greatest assurance we are capable of, concerning the Existence of material Beings. For we cannot act any thing, but by our Faculties; nor talk of Knowledge it self, but by the help of those Faculties which are fitted to apprehend even what Knowledge is. But besides the assurance our Senses themselves give us, that they do not err in the Information they give us, of the Existence of Things without us, when they are affected by them, we are farther confirmed in this assurance, by other concurrent Reasons.

§ 4. *First*, 'Tis plain, those Perceptions are produced in us, by exterior Causes affecting our Senses: Because *those that want the Organs of any Sense, never can have the Ideas belonging to that Sense* produced in their Minds. This is too evident to be doubted: and therefore we cannot but be assured, that they come in by the Organs of that Sense, and no other way. The Organs themselves, 'tis plain, do not produce them: for then the Eyes of a Man in the dark, would produce Colours, and his Nose smell Roses in the Winter: but we see no body gets the relish of a Pine-apple, till he goes to the *Indies* where it is, and tastes it.

§ 5. *Secondly*, Because *sometimes I find, that I cannot avoid the having those Ideas produced in my Mind.* For though when my Eyes are shut, or Windows fast, I can at Pleasure re-call to my Mind the *Ideas* of Light, or the Sun, which former Experience had lodg'd in my Memory; so I can at pleasure lay by that *Idea*, and take into my view that of the smell of a Rose, or taste of Sugar. But if I turn my Eyes at noon towards the Sun, I cannot avoid the *Ideas*, which the Light, or Sun, then produces in me. So that there is a manifest difference, between the *Ideas* laid up in my Memory; (over which, if they were there only, I should have constantly the same power to dispose of them, and lay them by at pleasure) and those which force themselves upon me, and I cannot avoid having. And therefore it must needs be some exterior cause, and the brisk acting of some Objects without me, whose efficacy I cannot resist, that produces those *Ideas* in my Mind, whether I will, or no. Besides, there is no body who doth not perceive the difference in himself, between contemplating the Sun, as he hath the *Idea* of it in his Memory. And actually looking upon it: Of which two, his perception is so distinct, that few of his *Ideas* are more distinguishable one from another. And therefore he hath certain knowledge, that they are not both Memory, or the Actions of his Mind, and Fancies only within him; but that actual seeing hath a Cause without.

§ 6. *Thirdly*, Add to this, that *many of those Ideas are produced in us with pain, which afterwards we remember without the least offence.* Thus the pain of Heat or Cold, when the *Idea* of it is revived in our Minds, gives us no disturbance; which, when felt, was very troublesome, and is again, when actually repeated: which is occasioned by the disorder the external Object causes in our Bodies, when applied to it: And we remember the pain of Hunger, Thirst, or the Head-ach, without any pain at all; which would either never disturb us, or else constantly do it, as often as we thought of it, were there nothing more but *Ideas* floating in our Minds, and Appearances entertaining our Fancies, without the real Existence of Things affecting us from abroad. And though mathemati-

cal demonstrations depend not upon sense, yet the examining them by Diagrams, gives great credit to the Evidence of our Sight, and seems to give it a Certainty approaching to that of the Demonstration it self. For it would be very strange, that a Man should allow it for an undeniable Truth, that two Angles of a Figure, which he measures by Lines and Angles of a Diagram, should be bigger one than the other; and yet doubt of the Existence of those Lines and Angles, which by looking on, he makes use of to measure that by.

§. 7. *Fourthly*, Our Senses, in many cases, bear witness to the Truth of each other's report, concerning the Existence of sensible Things without us. He that sees a Fire, may, if he doubt whether it be any thing more than a bare Fancy, feel it too; and be convinced, by putting his Hand in it. Which certainly could never be put into such exquisite pain, by a bare *Idea* or Phantom, unless that the pain be a fancy too: Which yet he cannot, when the Burn is well, by raising the *Idea* of it, bring upon himself again.

Thus I see, whilst I write this, I can change the Appearance of the Paper; and by designing the Letters, tell before-hand what new *Idea* it shall exhibit the very next moment, barely by my drawing the Pen over it: which will neither appear (let me fancy as much as I will) if my Hand stand still; or though I move my Pen, if my Eyes be shut: Nor when those Characters are once made on the Paper, can I chuse afterwards but see them as they are; that is, have the *Ideas* of such Letters as I have made. Whence it is manifest, that they are not barely the Sport and Play of my own Imagination, when I find, that the Characters that were made at the pleasure of my own Thoughts, do not obey them; nor yet cease to be, whenever I shall fancy it, but continue to affect my Senses constantly and regularly, according to the Figures I made them. To which if we will add, that the sight of those shall, from another Man, draw such Sounds, as I before-hand design they shall stand for, there will be little reason left to doubt, that those Words, I write, do really exist without me, when they cause a long series of regular Sounds to affect my Ears, which could not be the effect of my Imagination, nor could my Memory retain them in that order.

§. 8. But yet if after all this, any one will be so sceptical as to distrust his Senses, and to affirm, that all we see and hear, feel and taste, think and do, during our whole Being, is but the series and deluding appearances of a long Dream, whereof there is no reality; and therefore will question the Existence of all Things, or our Knowledge of any thing: I must desire him to consider, that if all be a Dream, then he doth but dream that he makes the Question; and so it is not much matter that a Man should answer. But yet, if he please, he may dream that I make this answer, That the certainty of Things existing in *rerum Naturâ*, when we have the testimony of our Senses for it, is not only as great as our frame can attain to, but as our Condition needs. For our Faculties being suited not to the full extent of Being, nor to a perfect, clear, comprehensive Knowledge of things, free from all doubt and scruple; but to the preservation of us in, whom they are; and accommodated to the use of Life: they serve to our purpose well enough, if they will but give us certain notice of those Things, which are convenient or inconvenient to us. For he that sees a Candle burning, and hath experimented the force of its Flame, by putting his Finger in it, will little doubt, that this is something existing without him, which does him harm, and puts him to great pain; which is assurance enough, when no Man requires greater certainty to govern his Actions by,

by, than what is as certain as his Actions themselves. And if our Dreamer pleases to try whether the glowing heat of a glass Furnace, be barely a wandering Imagination in a drowsie Man's Fancy, by putting his Hand into it, he may perhaps be wakened into a certainty greater than he could wish, that it is something more than bare Imagination. So that this evidence is as great as we can desire, being as certain to us, as our Pleasure or Pain; *i. e.* Happiness or Misery; beyond which, we have no concernment, either of Knowing or Being. Such an assurance of the Existence of Things without us, is sufficient to direct us in the attaining the Good, and avoiding the Evil which is caused by them, which is the important concernment we have of being made acquainted with them.

§. 9. In fine then, when our Senses do actually convey into our Understandings any *Idea*, we are well assured that there doth something at that time really exist without us, which doth affect our Senses, and by them give notice of its self to our apprehensive Faculties, and actually produce that *Idea* which we then perceive; and we cannot so far distrust their Testimony, as to doubt that such Collections of simple *Ideas*, as we have observed by our Senses to be united together, do really exist together. But *this Knowledge extends as far as the present Testimony of our Senses*, employ'd about particular Objects that do then affect them, *and no farther*. For if I saw such a Collection of simple *Ideas*, as is wont to be called *Man*, existing together one minute since, and am now alone, I cannot be sure that the same Man exists now, since there is no necessary connexion of his Existence a minute since, with his Existence now: by a thousand ways he may cease to be, since I had the Testimony of my Senses for his Existence. And if I cannot be sure, that the Man I saw last day, is now in being, I can be less sure that he is so, who hath been longer removed from my Senses, and I have not seen since yesterday, or since the last year, and much less can I be certain of the Existence of Men that I never saw. And therefore though it be highly probable, that Millions of Men do now exist, yet whilst I am alone writing of this, I have no unquestionable Knowledge of it; though the great likelihood of it puts me past doubt, and it be reasonable for me to do several things upon the confidence that there are Men (and Men also of my acquaintance, with whom I have to do) now in the World: But this is but Probability, not Knowledge.

§. 10. Whereby yet we may observe, how foolish and vain a thing it is, for a Man of narrow Knowledge, who having Reason given him to judge of the different evidence and probability of Things, and to be sway'd accordingly; how *vain*, I say, it is to *expect Demonstration* and Certainty *in things not capable of it*; and refuse Assent to very rational Propositions, and act contrary to very plain and clear Truths, because they cannot be made out so evident, as to surmount every the least (I will not say Reason, but) pretence of doubting. He that in ordinary Affairs of Life, would admit of nothing but direct plain Demonstration, would be sure of nothing in this World, but perishing quickly. The wholesomeness of his Meat or Drink, would be scarce capable of certainty enough to give him reason to venture on it: And I would fain know what 'tis he could do upon such grounds as were capable of no doubt, no Objections.

§. 11. As when our Senses are actually employ'd about any Object, we do know that it does exist; so by our Memory we may be assured, that heretofore Things that affected our Senses, have existed. And thus we have knowledge of the past Existence of several Things, whereof our Senses having informed us, our Memories still retain the *Ideas*; and of this, we

are past all doubt, so long as we remember well. But this Knowledge also reaches no farther than our Senses have formerly assured us. Thus seeing Water at this instant, 'tis an unquestionable Truth to me that Water doth exist: and remembering that I saw it yesterday, it will also be always true; and as long as my Memory retains it, always an undoubted Proposition to me, that Water did exist 10th. July, 1688. as it will also be equally true, that a certain number of very fine Colours did exist, which at the same time I saw upon a bubble of that Water: But being now quite out of the sight both of the Water and Bubbles too, it is no more certainly known to me that the Water doth exist, than that the Bubbles or Colours therein; it being no more necessary that Water should exist to day, because it existed yesterday, than that the Colours or Bubbles exist to day, because they existed yesterday, though it be exceedingly much more probable, because Water hath been observed to continue long in Existence, but Bubbles, and the Colours on them quickly cease to be.

§. 12. What *Ideas* we have of Spirits, and how we come by them, I have already shewn: But though we have those *Ideas* in our Minds, and know we have them there, the having the *Ideas* of Spirits, does not make us know that any such Things do exist without us, or that there are any *finite Spirits*, or any other spiritual Beings, but the eternal GOD. We have ground from revelation, and several other Reasons, to believe with assurance, that there are such Creatures; but our Senses not being able to discover them, we want the means of knowing their particular Existences. For we can no more know that there are finite Spirits really existing, by the *Idea* we have of such Beings in our Minds, than by the *Ideas* any one has of Fairies, or Centaurs, he can come to know, that Things answering those *Ideas*, do really exist.

And therefore concerning the Existence of finite Spirits, as well as several other Things, we must content our selves with the Evidence of Faith, but universal certain Propositions concerning this matter, are beyond our reach. For however true it may be, *v. g.* that all the intelligent Spirits that GOD ever created, do still exist; yet it can never make a part of our certain Knowledge. These, and the like Propositions, we may assent to, as highly probable, but are not, I fear, in this state, capable of knowing. We are not then to put others upon demonstrating, nor our selves upon search of universal Certainty in all those matters, wherein we are not capable of any other Knowledge, but what our Senses give us in this or that particular.

§. 13. By which it appears, that there are two sorts of *Propositions*; one concerning the *Existence* of any thing answerable to such an *Idea*: as having the *Idea* of an Elephant, Phoenix, Motion, or an Angel, in my Mind, the first and natural enquiry is, Whether such a thing does any where exist? And this Knowledge is only of *Particulars*. No existence of any thing without us, but only of GOD, can certainly be known farther than our Senses inform us. There is another sort of *Propositions*, wherein is expressed the Agreement, or Disagreement of our abstract *Ideas*, and their dependence one on another; and such Propositions may be *universal* and certain: So having the *Idea* of GOD and my self, of Fear and Obedience, I cannot but be sure that GOD is to be feared and obeyed by me: and this Proposition will be certain, concerning *Man* in general, if I have made an abstract *Idea* of such a Species, whereof I am one particular. But yet this Proposition, how certain soever, that Men ought to fear and obey, GOD proves not to me the Existence of Men in the World, but will be true of all such Creatures, whenever they do exist:

exist: Which certainty of such general Propositions, depends on the Agreement or Disagreement is to be discovered in those abstract *Ideas*.

§. 14. In the former case, our Knowledge is the consequence of the Existence of Things producing *Ideas* in our Minds by our Senses; in the latter, Knowledge is the consequence of the *Ideas* that are in our Minds whatsoever they are, and produce general certain Propositions, many whereof are called *æternæ Veritates*; and are indeed so, not from being written in the Minds of all Men, or that they were before the World: But wheresoever we can suppose such a Creature as *Man* is endowed with such Faculties, and thereby furnished with such *Ideas* as we have, we must conclude he must needs, when he applies his Thoughts to the consideration of his *Ideas*, know the Truth of certain Propositions that will arise from the Agreement, or Disagreement, he will perceive amongst them. For Names being supposed to stand perpetually for the same *Ideas*; and the same *Ideas* having immutably the same Habitues one to another, Propositions, concerning any abstract *Ideas* that are once true, must needs be eternal Verities.

C H A P. XII.

Of the Improvement of our Knowledge.

§. 1. **I**T having been the common received Opinion amongst Men of Letters, that *Maxims* were the foundations of all Knowledge; and that the Sciences were each of them built upon certain *præcognita*, from whence the Understanding was to take its rise, and by which it was to conduct it self, in its enquiries into the matters belonging to that Science, the beaten road of the Schools, has been to lay down in the beginning, one or more general Propositions, as Foundations whereon to build the Knowledge was to be had of that Subject. These Doctrines thus laid down for Foundations of any Science, were called *Principles*, as the beginnings from which we must set out, and look no farther backwards in our Enquiries, but take these for certain and unquestionable Truths, and established Principles.

§. 2. That which gave occasion to this way of proceeding in other Sciences, was (as I suppose) the good success it seemed to have in *Mathematicks*, wherein Men, being observed to attain a great certainty of Knowledge, these Sciences came by pre-eminence to be called μαθηματικά, and μάθησις, Learning, or things learn'd, thoroughly learn'd, as having of all other the greatest certainty, clearness, and evidence in them.

§. 3. But if any one will consider, he will (I guess) find, that the great advancement and certainty of real Knowledge Men arrived to in these Sciences, was not owing to the influence of their Principles, nor derived from any peculiar advantage they received from two or three general Maxims laid down in the beginning; but from the clear, distinct, compleat *Ideas* their Thoughts were employ'd about, and the relation of Equality and Excess so clear between some of them, that they had an intuitive Knowledge, and by that a way to discover it in others, and this without the help of those Maxims. For I ask, Is it not possible for a young Lad to know, that his whole Body is bigger than his little Finger, but by virtue of this Axiom, that the whole is bigger than a part; nor be assured of it,

till he has learned that Maxim? Or cannot a Country-Wench know, that having received a Shilling from one that owes her three, and a Shilling also from another that owes her three, that the remaining Debts in each of their hands are equal; cannot she know this, I say, without she fetch the certainty of it from this Maxim, That if you take Equals from Equals, the remainder will be Equals; a Maxim which possibly she never heard or thought of? I desire any one to consider which is known first and clearest by most People; the particular Instance, or the general Rule; and which it is that gives Life and Birth to the other. These general Rules are but the comparing our more general and abstract *Ideas*, which are the Workmanship of the Mind, made, and Names given to them for the easier dispatch in its Reasonings, and drawing into comprehensive Terms, and short Rules, its various and multiplied Observations: But Knowledge began in the Mind, and was founded on Particulars; though afterwards, perhaps, no notice be taken thereof; it being natural for the Mind (forward still to enlarge its Knowledge) most attentively to lay up those general Notions, and make the proper use of them, which is to disburthen the Memory of the cumbersome load of Particulars.

§. 4. But be it in the Mathematicks as it will, whether it be clearer, that taking an Inch from a black Line of two Inches, and an Inch from a red Line of two Inches, the remaining parts of the two Lines will be equal, or that *if you take equals from equals, the remainder will be equals*: Which, I say, of these two is the clearer and first known, I leave to any one to determine, it not being material to my present occasion. That which I have here to do, is to enquire, whether it be the readiest way to Knowledge, to begin with general Maxims, and build upon them, it be yet a safe way to take the Principles, which are laid down in any other Science, as unquestionable Truths; and so receive them without examination, and adhere to them, without suffering them to be doubted of, because Mathematicians have been so happy, or so fair, to use none but self-evident and undeniable. If this be so, I know not what may not pass for Truth in Morality, what may not be introduced and improved in Natural Philosophy.

Let that Principle of some of the old Philosophers, That all is Matter, and that there is nothing else, be received for certain and indubitable, and it will be easie to be seen by the Writings of some that have revived it again in our days, what consequences it will lead us into. Let any one, with *Polemo*, take the World; or, with the *Stoicks*, the *Æther*, or the Sun; or, with *Anaximenes*, the Air, to be God; and what a Divinity, Religion, and Worship must we needs have! *Nothing* can be so dangerous, as Principles thus taken up without questioning or examination; especially if they be such as concern Morality, which influence Men's Lives, and give a bias to all their Actions. Who might not justly expect another kind of Life in *Aristippus*, who placed Happiness in bodily Pleasure; and in *Antisthenes*, who made Vertue sufficient to Felicity? And he who, with *Plato*, shall place Beatitude in the Knowledge of GOD, will have his Thoughts raised to other Contemplations, than those who look not beyond this spot of Earth, and those perishing Things are to be had in it. He that, with *Archelaus*, shall lay it down as a Principle, That Right and Wrong, Honest and Dishonest, are defined only by Laws, and not by Nature, will have other measures of moral Rectitude and Pravity, than those who take it for granted, that we are under Obligations antecedent to all humane Constitutions.

§. 5. If therefore those that pass for *Principles*, are *not certain*, (which we must have some way to know, that we may be able to distinguish them from those that are doubtful,) but are only made so to us by our blind assent we are liable to be *misted* by them; and instead of being guided into Truth, we shall, by Principles, be only confirmed in Mistake and Errour.

§. 6. But since the Knowledge of the Certainty of Principles, as well as of all other Truths, depends only upon the perception we have of the Agreement, or Disagreement of our *Ideas*, *the way to improve our Knowledge*, is not, I am sure, blindly, and with an implicit Faith to receive and swallow Principles; but is, I think, *to get and fix in our Minds clear, distinct, and compleat Ideas*, as far as they are to be had, *and annex to them proper and constant Names*. And thus, perhaps, without any other Principles, but barely considering those perfect *Ideas*, and by *comparing them one with another*, finding their Agreement, and Disagreement, and their several Relations and Habitues; we shall get more true and clear Knowledge, by the conduct of this one Rule, than by taking up Principles, and thereby putting our Minds into the disposal of others.

§. 7. *We must* therefore, if we will proceed as Reason advises, *adapt our methods of Enquiry to the nature of the Ideas we examine*, and the Truth we search after. General and certain Truths, are only founded in the Habitues and Relations of abstract *Ideas*. A sagacious and methodical application of our Thoughts, for the finding out these Relations, is the only way to discover all that can be put, with Truth and Certainty concerning them, into general Propositions. By what steps we are to proceed, is to be learned in the Schools of the Mathematicians, who from very plain and easie beginnings, by gentle degrees, and a continued Chain of Reasonings, proceed to the discovery and demonstration of Truths, that appear at first sight beyond humane Capacity. The Art of finding Proofs, and the *Ideas* that demonstratively shew the equality or inequality of unapplicable Quantities, is, I confess, of great help to them: But whether something like this, in respect of other *Ideas*, as well as those of magnitude, may not in time be found out, I will not determine. This, I think, I may say, that if other *Ideas*, that are the real as well as nominal Essences of their Species, were pursued in the way familiar to Mathematicians, they would carry our Thoughts farther, and with greater evidence and clearness, than possibly we are apt to imagine.

§. 8. This gave me the confidence to advance that Conjecture, which I suggest, *Chap. 3. viz. That Morality is capable of Demonstration*, as well as Mathematicks. For the *Ideas* that Ethicks are conversant about, being all real Essences, and such as I imagine have a discoverable connexion and agreement one with another; so far as we can find their Habitues and Relations, so far we shall be possessed of certain, real, and general Truths: and I doubt not, but if a right method were taken, a great part of Morality might be made out with that clearness, that could leave, to a considering Man, no more reason to doubt, than he could have to doubt of the Truth of Propositions in Mathematicks which have been demonstrated to him.

§. 9. In our search after the Knowledge of Substances, our want of *Ideas*, that are suitable to such a way of proceeding, obliges us to a quite different method. We advance not here, as in the other, where our abstract *Ideas* are real, as well as nominal Essences, by contemplating our *Ideas*, and considering their Relations and Correspondencies, that helps us very little, for the Reasons that in another place we have at large shewed. By
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which, I think, it is evident, that Substances afford Matter of very little general Knowledge; and the bare Contemplation of their abstract *Ideas*, will carry us but a very little way in the search of Truth and Certainty. What then are we to do for the improvement of our *Knowledge in substantial Beings*? Here we are to take a quite contrary Course, the want of *Ideas* of their real *Essences* sends us from our own Thoughts, from contemplating, and drawing Consequences from our own *Ideas*, to the Things themselves as they exist: *Experience must teach* me what Reason cannot: and by trying, 'tis alone that I can certainly know what other Qualities co-exist with those of my complex *Idea*, *v. g.* whether that yellow, heavy, fusible Body, I call Gold, be malleable, or no; which Experience (which way ever it prove in that particular Body I examine) makes me not certain, that it is so, in all or any other yellow, heavy, fusible Body, but that which I have tried. Because it is no Consequence one way or t'other from my complex *Idea*, the Necessity or Inconsistence of Malleability, hath no visible connection with the Combination of that Colour, Weight, and Fusibility in any body. What I have said here of the nominal Essence of Gold, supposed to consist of a Body of such a determinate Colour, Weight, and Fusibility, will hold true, if Malleableness, Fixedness, and Solubility in *Aqua Regia* be added to it, our Reasonings from these *Ideas* will carry us but a little way in the certain discovery of the other Properties in those Masses of Matter, wherein all these are to be found. Because the other Properties of such Bodies, depending not on these, but on that unknown real Essence, on which these also depend, we cannot by them discover the rest; we can go no farther than the simple *Ideas* of our nominal Essence will carry us, which is very little beyond themselves; and so afford us but very sparingly any certain, universal, and useful Truths. For upon Trial, having found that particular piece (and all others of that Colour, Weight, and Fusibility, that I ever tried) malleable, that also makes now, perhaps, a part of my complex *Idea*, part of my nominal Essence of Gold; whereby though I make my complex *Idea*, to which I affix the Name Gold, to consist of more simple *Ideas* than before: yet still, it not containing the real Essence of any Species of Bodies, it helps me not certainly to know (I say to know, perhaps, it may to conjecture) the other remaining Properties of that Body, farther than they have a visible connection, with some or all of the simple *Ideas*, that make up my nominal Essence. For Example, I cannot be certain from this complex *Idea*, whether Gold be fixed, or no: Because as before, there is no necessary connection, or inconsistence to be discovered betwixt a complex *Idea* of a Body, yellow, heavy, fusible, malleable, betwixt these, I say, and Fixedness, so that I may certainly know, that in whatsoever Body those are found, there Fixedness is sure to be: Here again for assurance, I must apply my self to Experience, as far as that reaches, I may have certain Knowledge, but no farther.

§. 10. I deny not, but a Man accustomed to rational and regular Experiments, shall be able to see farther into the Nature of Bodies, and guess righter at their yet unknown Properties, than one that is a Stranger to them: But yet, as I have said, this is but Judgment and Opinion, not Knowledge and Certainty. This way of attaining, and improving our *Knowledge in Substances, only by Experience and History*, to which the weakness of our Faculties in this State of *Mediocrity* we are in, in this World, makes me suspect, that natural Philosophy is not capable of being made a Science. We are able, I imagine, to reach very little general Knowledge concerning the Species of Bodies, and their several Properties,

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Experiments and Historical Observations, we may have, from which we may draw Advantages of Ease and Health, and thereby increase our stock of Conveniences for this Life; but beyond this, our Talents reach not, our Faculties cannot attain.

§. 11. From whence it is obvious to conclude, that since our Faculties are not fitted to penetrate into the internal Fabrick and real Essences of Bodies; but yet plainly discover to us the Being of a God, and the Knowledge of our selves, enough to lead us into a full and clear discovery of our Duty, and great Concernment, it will become us, as rational Creatures, to employ our Faculties about what they are most adapted to, and follow the direction of Nature, where it seems to point us out the way. For 'tis rational to conclude, that our proper Employment lies in those Enquiries, and in that sort of Knowledge, which is most suited to our natural Capacities, and carries in it our greatest interest, *i. e.* the Condition of our eternal Estate: and therefore it is, I think, that *Morality is the proper Science, and Business of Mankind in general*, (who are both concerned, and fitted to search out their *Summum Bonum*,) as several Arts conversant about several parts of Nature, are the Lot and private Talent of particular Men, for the common Convenience of humane Life, and their own particular Subsistence in this World. Of what Consequence the discovery of one natural Body, and its Properties may be to humane Life, the whole great Continent of *America* is a convincing instance; whose Ignorance in useful Arts, and want of the greatest part of the Conveniences of Life, in a Country that abounded with all sorts of natural Plenty, I think, may be attributed to their Ignorance, of what was to be found in a very ordinary despicable Stone, I mean the Mineral of *Iron*. And whatever we think of our Parts or Improvements in this part of the World, where Knowledge and Plenty seem to vie each with other; yet to any one that will seriously reflect on it, I suppose, it will appear past doubt, that were the use of Iron lost among us, we should in a few Ages be unavoidably reduced to the Wants and Ignorance of the ancient savage *Americans*, whose natural Endowments and Provisions, come no way short of those of the most flourishing and polite Nations. So that he who first made known the use of that one contemptible Mineral, may be truly styled the Father of Arts, and Author of Plenty.

§. 12. I would *not therefore* be thought to disesteem, or *dissuade the Study of Nature*. I readily agree the Contemplation of his Works gives us occasion to admire, revere, and glorify their Author: and if rightly directed, may be of greater benefit to Mankind, than the Monuments of exemplary Charity, that have at so great Charge been raised, by the Founders of Hospitals and Alms-houses. He that first invented Printing; discovered the Use of the Compass; or made publick the Virtue and right Use of *Kin Kina*; did more for the propagation of Knowledge, for the acquisition of Conveniences of Life; and saved more from the Grave, than those who built Colleges, Work-houses, and Hospitals. All that I would say, is, that we should not be too forwardly possessed with the Opinion, or Expectation of Knowledge, where it is not to be had; or by Ways, that will not attain it: That we should not take doubtful Systems, for compleat Sciences; nor unintelligible Notions, for scientific Demonstrations. In the Knowledge of Bodies, we must be content to glean what we can from particular Experiments, since we cannot from a Discovery of their real Essences, grasp at a time whole Sheaves; and in bundles, comprehend the Nature and Properties of whole Species together. Where our Enquiry is concerning Co-existence, or Repugnancy to co-exist; which
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by Contemplation of our *Ideas*, we cannot discover, there Experience Observation, and natural History, must give us by our Senses, and by retail, an insight into corporeal Substances. The Knowledge of Bodies we must get by our Senses, warily employed in taking notice of their Qualities, and Operations on one another; and what we hope to know of separated Spirits in this World, we must, I think, expect only from Revelation. He that shall consider, *how little general Maxims, precarious Principles, and Hypotheses laid down at Pleasure, have promoted true Knowledge*, or helped to satisfy the Enquiries of rational Men after real Improvements. How little, I say, the setting out at the end, has for many Ages together advanced Men's Progress towards the Knowledge of natural Philosophy, will think, we have Reason to thank those Men, who in this latter Age have taken another Course, and have trod out to us, though not an easier way to learned Ignorance, yet a surer way to profitable Knowledge.

§. 13. Not that we may not, to explain any *Phænomena* of Nature, make use of any probable *Hypothesis* whatsoever: *Hypotheses*, if they are well made, are at least great helps to the Memory, and often direct us to new Discoveries. But my Meaning is, that we should *not take up any one too hastily*, (which the Mind, that would always penetrate into the Causes of Things, and have Principles to rest on, is very apt to do,) till we have very well examined Particulars, and made several Experiments, in that thing we would explain by our Hypothesis, and see whether it will agree to them all; whether our Principles will carry us quite through, and not be as inconsistent with one *Phænomenon* of Nature, as they seem to accommodate, and explain another. And at least, that we take care, that the Name of Principles deceive us not, nor impose on us, by making us receive that for an unquestionable Truth, which is really, at best, but a very doubtful conjecture, such as are most (I had almost said all) of the Hypotheses in natural Philosophy.

§. 14. But whether natural Philosophy be capable of Certainty, or no, the ways to enlarge our Knowledge, as far as we are capable, seem to me, in short, to be these two:

First, The First is to get, and settle in our Minds, as far as we can, *clear, distinct, and constant Ideas* of those Things we would consider and know. For it being evident, that our Knowledge cannot exceed our *Ideas*, where they are either imperfect, or obscure, we cannot expect to have certain, and perfect Knowledge.

Secondly, The other is the Art of *finding out* those *intermediate Ideas*, which may shew us the Agreement, or Repugnancy of other *Ideas*, which cannot be immediately compared.

§. 15. That these two (and not the relying on Maxims, and drawing Consequences from some general Propositions) are the right Method of improving our Knowledge in other *Ideas* of Modes, the Consideration of Mathematical Knowledge will easily inform us. Where first we shall find, that he that has not a perfect, and clear *Idea* of those Angles, or Figures of which he desires to know any thing, is utterly thereby incapable of any Knowledge about them. Suppose but a Man, not to have a perfect exact *Idea* of a right Angle, a *Scalenum*, or *Trapezium*; and there is nothing more clear, that he will in vain seek any Demonstration about them. And farther it is evident, that it was not the influence of those Maxims, which are taken for Principles in Mathematicks, that hath led the Masters of that Science into those wonderful Discoveries they have made. Let a Man of good Parts know all the Maxims generally made use of in Mathematicks never so perfectly, and contemplate their Extent and
Consequences

and Consequences, as much as he pleases, he will by their Assistance, I suppose, scarce ever come to know that the square of the Hypotienuse in a right angled Triangle, is equal to the squares of the two other sides. The Knowledge, that the Whole is equal to all its Parts, and if you take Equal from Equal, the remainder will be Equal, &c. helped him not, I presume, to this Demonstration : And a Man may, I think, pore long enough on those Axioms, without ever seeing one jot the more of mathematical Truths. They have been discovered by the Thoughts otherways applied : The Mind had other Objects, other Views before it, far different from those Maxims, when it first got the Knowledge of such kind of Truths in Mathematicks, which Men well enough acquainted with those received Axioms, but ignorant of their Method, who first made these Demonstrations, can never sufficiently admire. And who knows what Methods may hereafter be found out to enlarge our Knowledge in other Things, as well as that of *Algebra* in Mathematicks, which so readily finds out *Ideas* of Quantities to measure others by, whose Equality or Proportion we could otherwise very hardly, or, perhaps, never come to know ?

C H A P. XIII.

Some farther Considerations concerning our Knowledge.

§. 1. **O**ur Knowledge, as in other Things, so in this, has a great Conformity with our Sight, that it is *neither wholly necessary, nor wholly voluntary*. If our Knowledge were altogether necessary, all Men's Knowledge would not only be alike, but every Man would know all that is knowable ; and if it were wholly voluntary, some Men so little regard or value it, that they would have extreme little, or none at all. Men that have Senses, cannot chuse but receive some *Ideas* by them ; and if they have Memory, they cannot but retain some of them ; and if they have any distinguishing Faculty, cannot but perceive the Agreement, or Disagreement of some of them one with another : As he that has Eyes, if he will open them by day, cannot but see some Objects, and perceive a difference in them. But though a Man with his Eyes open in the Light, cannot but see : yet there be certain Objects, which he may chuse whether he will turn his Eyes to ; there may be in his reach a Book containing Pictures, and Discourses, capable to delight, or instruct him, which yet he may never have the Will to open, never take the Pains to look into.

§. 2. There is also another thing in a Man's Power, and that is, though he turn his Eyes sometimes towards an Object, yet he may chuse whether he will intently survey it, and with an accurate search, endeavour to observe all that is visible in it. But yet what he does see, he cannot see otherwise than he does : It depends not on his Will to see that Black, which appears Yellow ; nor to persuade himself, that what actually scalds him, feels cold : The Earth will not appear painted with Flowers, nor the Fields covered with Verdure, whenever he has a Mind to it ; in the cold Winter, he cannot help seeing it white and hoary, if he will look abroad. Just thus is it with our Understanding, all that is *voluntary* in our Knowledge, is the *employing*, or with-holding any of our *Faculties* from this or that sort of Objects, and a more, or less accurate survey of

them: But they being employed, *our Will hath no Power to determine the Knowledge of the Mind* one way or other; that is done only by the Objects themselves, as far as they are clearly discovered. And therefore, as far as Men's Senses are conversant about external Objects, the Mind cannot but receive those *Ideas*, which are presented by them, and be informed of the Existence of Things without: and so far as Men's Thoughts converse with their own clear and distinct *Ideas*, they cannot but, in some measure, observe the Agreement, and Disagreement that is to be found amongst some of them, which is so far Knowledge: and if they have Names for those *Ideas*, they have thus considered, they must needs be assured of the Truth of those Propositions, which express that Agreement, or Disagreement they perceive in them, and be undoubtedly convinced of those Truths. For what a Man sees, he cannot but see; and what he perceives, he cannot but know that he perceives.

§. 3. Thus he that has got the *Ideas* of Numbers, and hath taken the Pains to compare *One, Two, and Three*, to *Six*, cannot chuse but know that they are equal: He that hath got the *Idea* of a Triangle, and found the ways to measure its Angles, and their Magnitudes, is as certain that its three Angles are equal to two right ones, as that it is impossible for the same to be, and not to be.

He also that hath the *Idea* of an intelligent, but frail and weak Being, made by and depending on another, who is eternal, omnipotent, perfectly wise and good, will as certainly know that Man is to honour, fear, and obey God, as that the Sun shines when he sees it. For if he hath but the *Ideas* of two such Beings in his Mind, and will turn his Thoughts that way, and consider them, he will as certainly find that the Inferior, Finite, and Dependent, is under an Obligation to obey the Supreme and Infinite, as he is certain to find, that *Three, Five, and Seven*, are less than *Fifteen*, if he will consider, and compute those Numbers; nor can he be surer in a clear Morning that the Sun is risen, if he will but open his Eyes, and turn them that way. But yet these Truths, being never so certain, never so clear, he may be ignorant of either, or all of them, who will never take the Pains to employ his Faculties, as he should, to inform himself about them.

CHAP. XIV.

Of Judgment.

§. 1. **T**HE Understanding Faculties being given to Man, not barely for Speculation, but also for the Conduct of his Life, Man would be at a great loss, if he had nothing to direct him, but what has the Certainty of true *Knowledge*: for that being very short and scanty, as we have seen, he would be often utterly in the dark, and in most of the Actions of his Life, perfectly at a stand, had he nothing to guide him in the absence of clear and certain Knowledge. For he that will not eat, till he has Demonstration that it will nourish him; he that will not stir, till he infallibly knows the Business he goes about will succeed, will have little else to do, but sit still and perish.

§. 2. Therefore as God has set some Things in broad day-light; as he has given us some certain Knowledge, though limited to a few Things

in comparison, probably, as a Taste of what intellectual Creatures are capable of, to excite in us a Desire and Endeavour after a better State: So in the greatest part of our Concernment, he has afforded us only the twilight, as I may so say, of *Probability*, suitable, I presume, to that State of Mediocrity and Probationership, he has been pleased to place in us here; wherein we might not be over confident, and presume; but might by every day's Experience be made sensible of our short-sightedness and liability to Error; which might be a constant Admonition to us, to spend the days of this our Pilgrimage with Industry and Care, in the search, and following of that way, which might lead us to a State of greater Perfection. It being highly rational to think, even where Revelation is silent in the Case, That as Men employ those Talents, God has given them, here, they shall accordingly receive their Rewards at the close of the day, when their Sun shall set, and Night shall put an end to their Labours.

§. 3. The Faculty, which God has given Man to enlighten him, next to clear and certain Knowledge, is *Judgment*: whereby the Mind takes its *Ideas* to agree, or disagree; or which is the same, any Proposition to be true, or false, without perceiving a demonstrative Evidence in the Proofs. The Mind sometimes exercises this Judgment out of necessity, where demonstrative Proofs, and certain Knowledge are not to be had; and sometimes out of Laziness, Unskilfulness, or Haste, even where demonstrative and certain Proofs are to be had. Men often stay not warily to examine the Agreement or Disagreement of two *Ideas*, which they are desirous, or concerned to know; but either incapable of such Attention, as is requisite in a long Train of Gradations, or impatient of delay, lightly survey, or wholly pass over the Proofs; and so without making out the Demonstration, determine of the Agreement or Disagreement of two *Ideas*, as it were by a view of them, as they are at a distance, and take it to be the one or the other, as seems most likely to them upon such a loose survey. This Faculty of the Mind, when it is exercised immediately about Things, is called *Judgment*; when about Truths delivered in Words, is most commonly called *Assent* or *Dissent*: which being the most usual way, wherein the Mind has occasion to employ this Faculty, I shall under these Terms treat of it, as least liable in our Language to Equivocation.

§. 4. Thus the Mind has two Faculties, conversant about Truth and Falshood.

First, Knowledge, whereby it certainly perceives, and is undoubtedly satisfied of the Agreement or Disagreement of any *Ideas*.

Secondly, Judgment, which is the putting *Ideas* together, or separating them from one another in the Mind, when their certain Agreement, or Disagreement is not perceived, but *presumed* to be so; which is, as the Word imports, taken to be so before it certainly appears. And if it so unites, or separates them, as in Reality Things are, it is *right Judgment*.

C H A P. XV.

Of Probability.

§. 1. **A**S Demonstration is the shewing the Agreement, or Disagreement of two *Ideas*, by the intervention of one or more Proofs, which have a constant, immutable, and visible connexion one with another: so *Probability* is nothing but the appearance of such an Agreement, or Disagreement, by the intervention of Proofs, whose connexion is not constant and immutable, or at least is not perceived to be so, but is, or appears for the most part to be so, and is enough to induce the Mind to judge the Proposition to be true, or false, rather than the contrary. For example: In the demonstration of it, a Man perceives the certain immutable connexion there is of Equality, between the three Angles of a Triangle, and those intermediate ones, which are made use of to shew their Equality to two right ones; and so by an intuitive Knowledge of the Agreement, or Disagreement of the intermediate *Ideas* in each step of the progress, the whole Series is continued with an evidence, which clearly shews the Agreement, or Disagreement, of those three Angles, in equality to two right ones: And thus he has certain Knowledge that it is so. But another Man who never took the pains to observe the Demonstration, hearing a Mathematician, a Man of credit, affirm the three Angles of a Triangle, to be equal to two right ones, assents to it; *i. e.* receives it for true: In which case, the foundation of his Assent, is the Probability of the thing, the Proof being such as, for the most part, carries Truth with it: The Man on whose Testimony he receives it, not being wont to affirm any thing contrary to, or besides his Knowledge, especially in matters of this kind. So that that which causes his Assent to this Proposition, that the three Angles of a Triangle are equal to two right ones, that which makes him take these *Ideas* to agree, without knowing them to do so, is the wonted Veracity of the Speaker in other cases, or his supposed Veracity in this.

§. 2. Our Knowledge, as has been shewn, being very narrow, and we not happy enough to find certain Truth in every thing, we have occasion to consider, most of the Propositions we think, reason, discourse, nay act upon, are such, as we cannot have undoubted Knowledge of their Truth: yet some of them border so near upon Certainty, that we make no doubt at all about them; but assent to them as firmly, and act according to that Assent as vigorously, as if they were infallibly demonstrated, and that our Knowledge of them was perfect and certain. But there being degrees herein, from the very neighbourhood of Certainty and Evidence, quite down to Improbability and Unlikeliness, even to the Confines of Impossibility; and also degrees of Assent from certain Knowledge, and what is next it, full Assurance and Confidence, quite down to Conjecture, Doubt, Distrust, and Disbelief. I shall come now, as having (as I think) found out the bounds of humane Knowledge and Certainty, in the next place to consider the several degrees and grounds of *Probability, and Assent or Faith*.

§. 3. *Probability* then is likeliness to be true, the very notation of the Word signifying such a Proposition, for which there be Arguments or Proofs, to make it pass or be received for true. The entertainment the Mind gives this sort of Propositions, is called *Belief, Assent, or Opinion*, which is the admitting or receiving any Proposition for true, upon Arguments or Proofs that are found to persuade us to receive it as true, with-

without certain Knowledge that it is so. And herein lies the *difference between Probability and Certainty, Faith and Knowledge*, that in all the parts of Knowledge, there is intuition; each immediate *Idea*, each step has its visible and certain connexion; in Belief not so. That which makes me believe, is something extraneous to the thing I believe; something not evidently joined on both sides to, and so not manifestly shewing the Agreement, or Disagreement of those *Ideas* that are under consideration.

§. 4. *Probability* then being to supply the defect of our Knowledge, and to guide us where that fails, it is always conversant about things, whereof we have no certainty, but only some inducements to receive it for true. The *grounds of it* are, in short, these *two* following:

First, The conformity of any thing with our own Knowledge, Observation, and Experience.

Secondly, The Testimony of others, vouching their Observation and Experience. In the Testimony of others, is to be considered, 1. The Number. 2. The Integrity. 3. The Skill of the Witnesses. 4. The Design of the Author, where it is a Testimony out of a Book cited. 5. The Consistency of the Parts, and Circumstances of the Relation. 6. Contrary Testimonies.

§. 5. Now *Probability* wanting that intuitive Evidence, which infallibly determines the Understanding, and produces certain Knowledge, *the Mind, before it rationally assents or dissents to any probable Proposition, ought to examine all the grounds of Probability*, and see how they make more or less for or against it, and upon a due balancing the whole, reject, or receive it, with a more or less firm assent, proportionably to the preponderancy of the greater grounds of *Probably* on one side or the other. For example:

If I myself see a Man walk on the Ice, it is past *Probability*, 'tis Knowledge: but if another tells me he saw a Man in *England* in the midst of a sharp Winter, walk upon Water harden'd with cold; this has so great conformity with what is usually observed to happen, that I am disposed by the nature of the thing it self to assent to it, unless some manifest suspicion attend the Relation of that matter of fact. But if the same thing be told to one born between the Tropicks, who never saw nor heard of any such thing before, there the whole *Probability* relies on Testimony: And as the Relators are more in number, and of more Credit, and have no Interest to speak contrary to the Truth; so that matter of fact is like to find more or less belief. Though to a Man, whose Experience has been always quite contrary, and has never heard of any thing like it, the most untainted Credit of a Witness will scarce be able to find belief. As it happened to a Dutch Ambassadour, who entertaining the King of *Siam* with the particularities of *Holland*, which he was inquisitive after, amongst other things told him, that the Water in his Country, would sometimes, in cold weather, be so hard that Men walked upon it, and that it would bear an Elephant, if he were there. To which the King replied, *Hitherto I have believed the strange Things you have told me, because I look upon you as a sober fair Man, but now I am sure you lye.*

§. 6. Upon these grounds depends the *Probability* of any Proposition: And as the conformity of our Knowledge, as the certainty of Observations, as the frequency and constancy of Experience, and the number and credibility of Testimonies, do more or less agree, or disagree with it, so is any Proposition in it self, more or less probable. There is another, I confess, which though by it self it be no true ground of *Probability*, yet is often made use of for one, by which Men most commonly regulate their

their Assent, and upon which they pin their Faith more than any thing else; any, that is, *the Opinion of others*; though there cannot be a more dangerous thing to rely on, nor more likely to mislead one; since there is much more Falshood and Errour amongst Men, than Truth and Knowledge. And if the Opinions and Persuasions of others, whom we know and think well of, be a ground of Assent, Men have Reason to be Heathens in *Japan*, Mahumetans in *Turkey*, Papists in *Spain*, Protestants in *England*, and Lutherans in *Sueden*. But of this wrong ground of Assent, I shall have occasion to speak more at large in another place.

C H A P. XVI.

Of the Degrees of Assent.

§. 1. **T**He grounds of Probability, we have laid down in the foregoing Chapter, as they are the foundations on which our *Assent* is built; so are they also the measure whereby its several degrees are, or ought to be *regulated*: only we are to take notice, that whatever grounds of Probability there may be, they yet operate no farther on the Mind, which searches after Truth, and endeavours to judge right, than they appear; at least in the first Judgment or Search that the Mind makes. I confess, in the Opinions Men have, and firmly stick to, in the World, their Assent is not always from an actual view of the Reasons that at first prevailed with them: It being in many cases almost impossible, and in most very hard, even for those who have very admirable Memories, to retain all the Proofs, which, upon a due examination, made them embrace that side of the Question. It suffices, that they have once with care and fairness, examined the matter as far as they could; and that they have searched into all the Particulars, that they could imagine to give any light to the Question; and with the best of their Skill, cast up the account upon the whole Evidence: and thus having once found on which side the Probability appeared to them, after as full and exact an enquiry as they can make, they lay up the conclusion in their Memories, as a Truth they have discovered; and for the future, they remain satisfied with the Testimony of their Memories, that this is the Opinion, that by the Proofs they have once seen of it, deserves such a degree of their Assent, as they afford it.

§. 2. This is all that the greatest part of Men are capable of doing, in regulating their Opinions and Judgments; unless a Man will exact of them, either to retain distinctly in their Memories all the Proofs concerning any probable Truth, and that too in the same order, and regular deduction of Consequences, in which they have formerly placed or seen them; which sometimes is enough to fill a large Volume upon one single Question: Or else they must require a Man, for every Opinion that he embraces, every day to examine the Proofs: both which, are impossible. It is unavoidable therefore, that the Memory be relied on in the case, and that Men be *persuaded of several Opinions, whereof the Proofs are not actually in their Thoughts*; nay, which perhaps they are not able actually to re-call. Without this, the greatest part of Men must be either very Scepticks, or change every moment, and yield themselves up to whoever,

ever, having lately studied the Question, offers them Arguments; which for want of Memory, they are not able presently to answer.

§. 3. I cannot but own, that Men's *sticking to their past Judgment*, and adhering firmly to Conclusions formerly made, is often the cause of great obstinacy in Error and Mistake. But the fault is not that they rely on their Memories, for what they have before well judged; but because they judged before they had well examined. May we not find a great number (not to say the greatest part) of Men, that think they have formed right Judgments of several matters; and that for no other reason, but because they never thought otherwise? That imagine themselves to have judged right, only because they never questioned, never examined their own Opinions? Which is indeed to think they judged right, because they never judged at all: And yet these of all Men hold their Opinions with the greatest stiffness; those being generally the most fierce and firm in their Tenets, who have least examined them. What we once know, we are certain is so: and we may be secure, that there are no latent Proofs undiscovered, which may overturn our Knowledge, or bring it in doubt. But in matters of Probability, 'tis not in every case that we can be sure that we have all the Particulars before us, that any way concern the Question; and that there is no evidence behind, and yet unseen, which may cast the Probability on the other side, and out-weigh all that at present seems to preponderate with us. Who almost is there, that hath the leisure, patience, and means, to collect together all the Proofs concerning most of the Opinions he has, so as safely to conclude, that he hath a clear and full view, and that there is no more to be alledged for his better information? And yet we are forced to determine our selves on the one side or other. The conduct of our Lives, and the management of our great Concerns, will not bear delay: for those depend, for the most part, on the determination of our Judgment in points, wherein we are not capable of certain and demonstrative Knowledge, and wherein it is necessary for us to embrace the one side, or the other.

§. 4. Since therefore it is unavoidable to the greatest part of Men, if not all, to have several Opinions, without certain and indubitable Proofs of their Truths; and it carries too great an imputation of ignorance, lightness, or folly, for Men to quit and renounce their former Tenets, presently upon the offer of an Argument, which they cannot immediately answer, and shew the insufficiency of: It would, methinks, become all Men to maintain *Peace*, and the common Offices of Humanity, and *Friendship, in the diversity of Opinions*: since we cannot reasonably expect, that any one should readily and obsequiously quit his own Opinion, and embrace ours, with a blind resignation to an Authority, which the Understanding of Man acknowledges not. For however it may often mistake, it can own no other Guide but Reason, nor blindly submit to the Will and Dictates of another. If he you would bring over to your Sentiments be one that examines before he assents, you must give him leave, at his leisure, to go over the account again, and re-calling what is out of his Mind, examine all the Particulars, to see on which side the advantage lies: And if he will not think our Arguments of weight enough to engage him anew in so much pains, 'tis but what we do often our selves in the like case; and we should take it amiss, if others should prescribe to us what points we should study. And if he be one who takes his Opinions upon trust, How can we imagine that he should renounce those Tenets, which Time and Custom have so settled in his Mind, that he thinks them self-evident, and of an unquestionable Certainty; or which he takes to
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be impressions he has received from GOD Himself, or from Men sent by Him? How can we expect, I say, that Opinions thus settled, should be given up to the Arguments or Authority of a Stranger, or Adversary; especially if there be any suspicion of Interest, or Design, as there never fails to be, where Men find themselves ill treated? We should do well to commiserate our mutual Ignorance, and endeavour to remove it in all the gentle and fair ways of Information; and not instantly treat others ill, as obstinate and perverse, because they will not renounce their own, and receive our Opinions, or at least those we would force upon them, when 'tis more than probable that we are no less obstinate in not embracing theirs. For where is the Man that has uncontested Evidence of the Truth of all that he holds, or of the Fallhood of all he condemns; or can say, that he has examined, to the bottom, all his own or other Men's Opinions? The necessity of believing, without knowledge, nay, often upon very slight grounds, in this fleeting state of Action and Blindness we are in, should make us more busie and careful to inform our selves, than constrain others. At least, those who have not thoroughly examined to the bottom all their own Tenets, must confess they are unfit to prescribe to others; and are unreasonable in imposing that as a Truth on other Men's Belief, which they themselves have not searched into, nor weighed the Arguments of Probability, on which they should receive or reject it. Those who have fairly and truly examined, and are thereby got past doubt in all the Doctrines they profess, and govern themselves by, would have a juster pretence to require others to follow them: But these are so few in number, and find so little reason to be magisterial in their Opinions, that nothing insolent and imperious is to be expected from them: And there is reason to think, that if Men were better instructed themselves, they would be less imposing on others.

§. 5. But to return to the grounds of Assent, and the several degrees of it, we are to take notice, that the Propositions we receive upon Inducements of *Probability*, are of *two sorts*; either concerning some particular Existence, or, as it is usually termed, matter of fact, which falling under our Observation, is capable of humane Testimony; or else concerning Things, which being beyond the discovery of our Senses, are not capable of any such Testimony.

§. 6. Concerning the *first* of these, *viz. particular matter of fact*,

First, Where any particular thing, consonant to the constant Observation of our selves and others, in the like case, comes attested with the concurrent Reports of all that mention it, we receive it as easily; and build as firmly upon it, as if it were certain knowledge; and we reason and act thereupon with as little doubt, as if it were perfect demonstration. Thus if all *English*-men, who have occasion to mention it, should affirm, that it froze in *England* the last Winter, or that there were Swallows seen there in the Summer, I think a Man could almost as little doubt of it, as that Seven and Four are Eleven. The first therefore, and *highest degree of Probability*, is, when the general consent of all Men, in all Ages, as far as it can be known, concurs with a Man's constant and never-failing Experience in like cases, to confirm the Truth of any particular matter of fact attested by fair Witnesses: such are all the stated Constitutions and Properties of Bodies, and the regular proceedings of Causes and Effects in the ordinary course of Nature. This we call an Argument from the nature of Things themselves. For what our own and other Men's constant Observation, has found always to be after the same manner

manner, that we with reason conclude to be the Effects of steddy and regular Causes, though they come not within the reach of our Knowledge. Thus, That Fire warmed a Man, made Lead fluid, and changed the colour or consistency in Wood or Charcoal: that Iron sunk in Water, and swam in Quicksilver: These and the like Propositions about particular facts, being agreeable to our constant Experience, as often as we have to do with these matters; and being generally spoke of, (when mentioned by others,) as things found constantly to be so, and therefore not so much as controverted by any body, we are put past doubt, that a relation affirming any such thing to have been, or any predication that it will happen again in the same manner, is very true. These Probabilities rise so near to Certainty, that they govern our Thoughts as absolutely, and influence all our Actions as fully, as the most evident demonstration; and in what concerns us, we make little or no difference between them and certain Knowledge. And our Belief thus grounded, rises to Assurance.

§. 7. *Secondly*, The next degree of Probability is, when I find by my own Experience, and the Agreement of all others that mention it, a thing to be, for the most part, so; and that the particular instance of it is attested by many and undoubted Witnesses: *v.g.* History giving us such an account of Men in all Ages; and my own Experience, as far as I had an opportunity to observe, confirming it, that most Men prefer their private Advantage, to the publick. If all Historians that write of *Tiberius*, say that *Tiberius* did so, it is extremely probable. And in this case, our Assent has a sufficient foundation to raise it self to a degree, which we may call Confidence.

§. 8. *Thirdly*, In matters that happen indifferently, as that a Bird should fly this or that way; that it should thunder on a Man's right or left Hand, &c. when any particular matter of fact comes attested by the concurrent Testimony of unsuspected Witnesses, there our Assent is also unavoidable. Thus: That there is such a City in *Italy*, as *Rome*: That about 1700 years ago, there lived in it a Man, called *Julius Cæsar*; that he was a General, and that he won a Battel again another called *Pompey*. This, though in the nature of the thing, there be nothing for, nor against it; yet, being related by Historians of credit, and contradicted by no one Writer, a Man cannot avoid believing it, and can as little doubt of it, as he does of the Being and Actions of his own Acquaintance, whereof he himself is a Witness.

§. 9. Thus far the matter goes easie enough. Probability upon such grounds carries so much evidence with it, that it naturally determines the Judgment, and leaves us as little at liberty to believe, or disbelieve, as a Demonstration does, whether we will know, or be ignorant. The difficulty is, when Testimonies contradict common Experience, and the report of History and Witnesses clashes with the ordinary course of Nature, or with one another; there it is, where Diligence, Attention, and Exactness is required, to form a right Judgment, and to proportion the Assent to the different Evidence and Probability of the thing; which rises and falls, according as those two foundations of Credibility, *viz.* Common Observation in like cases, and particular Testimonies in that particular instance, favours or contradicts it. These are liable to so great variety of contrary Observations, Circumstances, Reports, different Qualifications, Tempers, Designs, Over-sights, &c. of the Reporters, that 'tis impossible to reduce to precise Rules, the various degrees wherein Men give their Assent. This only may be said in general, That as the Argu-

ments and Proofs, *pro* and *con*, upon due examination, nicely weighing every particular circumstance, shall to any one appear; upon the whole matter, in a greater or less degree, to preponderate on either side, so they are fitted to produce in the Mind such different entertainment, as we call *Belief, Conjecture, Guess, Doubt, Wavering, Distrust, Disbelief, &c.*

§. 10. This is what concerns Assent in matters wherein Testimony is made use of; concerning which, I think, it may not be amiss to take notice of a Rule observed in the Law of *England*; which is, That though the attested Copy of a Record be good proof, yet the Copy of a Copy never so well attested, and by never so credible Witnesses, will not be admitted as a proof in Judicature. This is so generally approved as reasonable, and suited to the Wisdom and Caution to be used in our Enquiry after material Truths, that I never yet heard of any one that blamed it. This practice, if it be allowable in the Decisions of Right and Wrong, carries this Observation along with it, *viz.* That any Testimony, the farther off it is from the original Truth, the less force and proof it has. The Being and Existence of the thing it self, is what I call the original Truth. A credible Man vouching his Knowledge of it, is a good proof: But if another equally credible, do witness it from his Report, the Testimony is weaker; and a third that attests the Hearsay of an Hearsay, is yet less considerable. So that *in traditional Truths, each remove weakens the force of the proof*; And the more hands the Tradition has successively passed through, the less strength and evidence does it receive from them. This I thought necessary to be taken notice of: Because I find amongst some Men, the quite contrary commonly practised, who look on Opinions to gain force by growing older; and what a thousand year since would not, to a rational Man, contemporary with the first Voucher, have appeared at all probable, is now urged as certain beyond all question, only because several have since, from him, said it one after another. Upon this ground Propositions, evidently false or doubtful enough in their first beginning, come by an inverted Rule of Probability, to pass for authentick Truths: and those which found or deserved little credit from the mouths of their first Authors, are thought to grow venerable by Age, and are urged as undeniable.

§. 11. I would not be thought here to lessen the Credit and use of *History*: 'tis all the light we have in many cases; and we receive from it a great part of the useful Truths we have, with a convincing evidence. I think nothing more valuable than the Records of Antiquity: I wish we had more of them, and more uncorrupted. But this, Truth it self forces me to say, That no Probability can arise higher than its first Original. What has no other Evidence than the single Testimony of one onely Witness, must stand or fall by his onely Testimony, whether good, bad, or indifferent; and though cited afterwards by hundreds of others, one after another, is so far from receiving any strength thereby, that it is only the Weaker. Passion, Interest, Inadvertency, Mistake of his Meaning, and a thousand odd Reasons, or Caprichios, Men's Minds are acted by, (impossible to be discovered,) may make one Man quote another Man's Words or Meaning wrong. He that has but ever so little examined the Citations of Writers, cannot doubt how little Credit the Quotations deserve, where the Originals are wanting; and consequently how much less Quotations of Quotations can be relied on. This is certain, that what in one Age was affirmed upon slight grounds, can never after come to be more valid in future Ages, by being often repeated. But the farther still it is from the Original, the less valid it is, and has always less force

force in the mouth, or writing of him that last made use of it, than in his from whom he received it.

§. 12. The Probabilities we have hitherto mentioned, are only such as concern matter of fact, and such Things as are capable of Observation and Testimony : there remains that other sort, *concerning* which, Men entertain Opinions with variety of Assent, though the *Things* be such, *that falling not under the reach of our Senses, are not capable of Testimony*; and such are, 1. The Existence, Nature, and Operations of finite immaterial Beings without us; as Spirits, Angels, Devils, &c. or the Existence of material Beings; which either for their smallness in themselves, or remoteness from us, our Senses cannot take notice of, as whether there be any Plants Animals, and intelligent Inhabitants of the Planets, and other Mansions of the vast Universe. 2. Concerning the manner of Operation in most parts of the Works of Nature; wherein though we see the sensible effects, yet their causes are unknown, and we perceive not the ways and manner how they are produced. We see Animals are generated, nourished, and move; the Load-stone draws Iron; and the parts of a Candle successively melting, turn into flame, and give us both light and heat. These and the like Effects we see and know: but the causes that operate, and the manner they are produced in, we can only guess, and probably conjecture. For these and the like coming not within the scrutiny of humane Senses, cannot be examined by them, or be attested by any body, and therefore can appear more or less probable, only as they more or less agree to Truths that are established in our Minds, and as they hold proportion to other parts of our Knowledge and Observation. *Analogy* in these matters is the only help we have, and 'tis from that alone we draw all our grounds of Probability. Thus observing that the bare rubbing of two Bodies violently one upon another, produces heat, and very often fire it self, we have reason to think, that what we call Heat and Fire, consists in a certain violent agitation of the imperceptible minute parts of the burning matter: observing likewise, that the different refractions of pellucid Bodies produce in our Eyes the different appearances of several Colours; and also that the different ranging and laying the superficial parts of several Bodies, as of Velvet, watered Silk, &c. does the like, we think it probable that the Colour and shining of Bodies, is in them nothing but the different Arrangement and Refraction of their minute and insensible parts. Thus finding in all the parts of the Creation, that fall under humane Observation, that there is a gradual connexion of one with another, without any great or discernable gaps between, in all that great variety of Things we see in the World, which are so closely linked together, that, in the several ranks of Beings, it is not easie to discover the bounds betwixt them, we have Reason to be persuaded, that in such gentle steps Things in Perfection ascend upwards. 'Tis an hard Matter to say where Sensible and Rational begin, and where Insensible and Irrational end; and who is there quick-sighted enough to determine precisely which is the lowest Species of living Things, and which the first of those which have no Life? Things, as far as we can observe lessen and augment, as the quantity does in a regular Cone, where though there be a manifest odds betwixt the bigness of the Diametre at remote distances: yet the difference between the upper and under, where they touch one another, is hardly discernable. The difference is exceeding great between some Men, and some Animals: But if we will compare the Understanding and Abilities of some Men, and some Brutes, we shall find so little difference, that 'twill be hard to say, that that of the Man is either clearer or larger: Observing, I say, such gradual and gentle descents

downwards in those parts of the Creation, that are beneath Man, the Rule of Analogy may make it probable, that it is so also in Things above us, and our Observation; and that there are several ranks of intelligent Beings, excelling us in several degrees of Perfection, ascending upwards towards the infinite Perfection of the Creator, by gentle steps and differences, that are every one at no great distance from the next to it. This sort of Probability, which is the best conduct of rational Experiments, and the rise of Hypothesis has also its Use and Influence: and a wary Reasoning from Analogy leads us often into the discovery of Truths, and useful Productions, which would otherwise lie concealed.

§. 13. Though the common Experience, and the ordinary Course of Things have justly a mighty Influence on the Minds of Men, to make them give or refuse Credit to any thing proposed to their Belief; yet there is one Case, wherein the strangeness of the Fact lessens not the Assent to a fair Testimony given of it. For where such supernatural Events are suitable to ends aim'd at by him, who has the Power to change the course of Nature, there, under such Circumstances, they may be the fitter to procure Belief, by how much the more they are beyond, or contrary to ordinary Observation. This is the proper Case of *Miracles*, which well attested, do not only find Credit themselves; but give it also to other Truths, which need such Confirmation.

§. 14. Besides those we have hitherto mentioned; there is one sort of Propositions that challenge the highest degree of our Assent, upon bare Testimony, whether the thing proposed, agree or disagree with common Experience, and the ordinary course of Things, or no. The Reason whereof is, because the Testimony is of such an one, as cannot deceive, nor be deceived, and that is of God himself. This carries with it Certainty beyond Doubt, Evidence beyond Exception. This is called by a peculiar Name, *Revelation*, and our Assent to it, *Faith*: which has as much Certainty as our Knowledge it self; and we may as well doubt of our own Being, as we can, whether any Revelation from GOD be true. So that Faith is a settled and sure Principle of Assent and Assurance, and leaves no manner of room for Doubt or Hesitation: Only we must be sure, that it be a divine Revelation, and that we understand it right; else we shall expose our selves to all the Extravagancy of Enthusiasm, and all the Error of wrong Principles, if we have Faith and Assurance in what is not divine Revelation. And therefore in those Cases, our Assent can be rationally no higher than the Evidence of its being a Revelation, and that this is the meaning of the Expressions it is delivered in. If the Evidence of its being a Revelation, or that this its true Sense be only on probable Proofs, our Assent can reach no higher than an Assurance or Diffidence, arising from the more, or less apparent Probability of the Proofs. But of Faith, and the Precedency it ought to have before other Arguments of Persuasion, I shall speak more hereafter, where I treat of it, as it is ordinarily placed, in contradistinction to Reason: though in Truth, it be nothing else but an Assent founded on the highest Reason.

C H A P. XVII.

Of Reason.

§. 1. **T**HE Word *Reason* in the *English* Language has different Significations: sometimes it is taken for true, and clear Principles: Sometimes for clear, and fair deductions from those Principles: and sometimes for the Cause, and particularly the final Cause: but the Consideration I shall have of it here, is in a Signification different from all these; and that is, as it stands for a Faculty in Man, That Faculty, whereby Man is supposed to be distinguished from Beasts, and wherein it is evident he much surpasses them.

§. 2. If general Knowledge, as has been shewn, consists in a Perception of the Agreement, or Disagreement of our own *Ideas*; and the Knowledge of the Existence of all Things without us (except only of GOD) be had only by our Senses; What room then is there for the Exercise of any other Faculty, but outward Sense and inward Perception? What need is there of Reason? Very much; both for the Enlargement of our Knowledge, and regulating our Assent: For it hath to do, both in Knowledge and Opinion, and is necessary, and assisting to all our other intellectual Faculties, and indeed contains two of them, viz. *Sagacity* and *Illation*: By the one, it finds out, and by the other, it so orders the intermediate *Ideas*, as to discover what connexion there is in each link of the Chain, whereby the Extremes are held together; and thereby, as it were, to draw into view the Truth sought for, which is that we call Illation or Inference, and consists in nothing but the Perception of the connexion there is between the *Ideas*, in each step of the deduction, whereby the Mind comes to see, either the certain Agreement or Disagreement of any two *Ideas*, as in Demonstration, in which it arrives at Knowledge; or their probable connexion, on which it gives or with-holds its Assent, as in Opinion. Sense and Intuition reach but a very little way; the greatest part of our Knowledge depends upon Deductions and intermediate *Ideas*: And in those Cases, where we are fain to substitute Assent instead of Knowledge, and take Propositions for true, without being certain they are so, we have need to find out, examine, and compare the grounds of their Probability. In both these Cases, the Faculty which finds out the Means, and rightly applies them to discover Certainty in the one, and Probability in the other, is that which we call Reason. For as Reason perceives the necessary, and indubitable connexion of all the *Ideas* or Proofs one to another, in each step of any Demonstration that produces Knowledge: so it likewise perceives the probable connexion of all the *Ideas* or Proofs one to another, in every step of a Discourse, to which it will think Assent due. This is the lowest degree of that, which can be truly called Reason: For where the Mind does not perceive this probable connexion; where it does not discern, whether there be any such connexion, or no, there Men's Opinions are not the product of Judgment, or the Consequence of Reason; but the effects of Chance and Hazard, of a Mind floating at all Adventures, without choice, and without direction.

§. 3. So that we may in *Reason* consider these four degrees; the first and highest, is the discovering, and finding out of Proofs; the second, the regular and methodical Disposition of them, and laying them in a clear
and

and fit Order, to make their Connexion and Force be plainly and easily perceived ; the third is the perceiving their connexion ; and the fourth, the making a right conclusion. These several degrees may be observed in any mathematical Demonstration : it being one thing to perceive the connexion of each part, as the Demonstration is made by another ; another to perceive the dependence of the conclusion on all the parts ; a third to make out a Demonstration clearly and neatly ones self, and something different from all these, to have first found out those intermediate *Ideas* or Proofs by which it is made.

§. 4. There is one thing more, which I shall desire to be considered concerning Reason ; and that is, whether *Syllogism*, as is generally thought, be the proper instrument of it, and the usefulest way of exercising this Faculty. The Causes I have to doubt, are these :

First, Because Syllogism serves our Reason, but in one only of the fore-mentioned parts of it ; and that is, to shew the connexion of the Proofs in any one instance, and no more : but in this, it is of no great use, since the Mind can perceive such connexion where it really is, as easily, nay, perhaps, better without it.

If we will observe the Actings of our own Minds, we shall find, that we reason best and clearest, when we only observe the connexion of the Proofs, without reducing it to any Rule of Syllogism : and therefore we may take notice, that there are many Men that reason exceeding clear and rightly, who know not how to make a Syllogism. He that will look into many parts of *Asia* and *America*, will find Men reason there, perhaps, as acutely as himself, who yet never heard of a Syllogism, nor can reduce any one Argument to those Forms. Indeed sometimes it may serve to discover a Fallacy hid in a rhetorical Flourish, or cunningly wrapp'd up in a smooth Period ; and stripping an Absurdity of the Cover of Wit, and good Language, shew it in its naked Deformity : But the Mind is not taught to reason by these Rules, it has a native Faculty to perceive the Coherence, or Incoherence of its *Ideas*, and can range them right, without any such perplexing Repetitions. Tell a Country Gentlewoman, that the Wind is South-West, and the Weather louring, and like to rain, and she will easily understand, 'tis not safe for her to go abroad thin clad, in such a day, after a Fever : she clearly sees the probable connexion of all these, *viz.* South-West-Wind, and Clouds, Rain, wetting, taking Cold, Relapse, and Danger of Death, without tying them together in those artificial and cumbersome Fetters of several Syllogisms, that clog and hinder the Mind, which proceeds from one part to another quicker and clearer without them ; and the Probability which she easily perceives in Things thus in their native State, would be quite lost, if this Argument were managed learnedly, and propos'd in Mode and Figure. For it very often confounds the connexion : and, I think, every one will perceive in mathematical Demonstrations, that the Knowledge gain'd thereby, comes shortest and clearest without Syllogism.

Secondly, Because though Syllogism serves to shew the Force or Fallacy of an Argument, made use of in the usual way of discoursing, by supplying the absent Proposition, and so setting it before the view in a clear Light ; yet it no less engages the Mind in the perplexity of obscure, equivocal, and fallacious Terms, wherewith this artificial way of Reasoning always abounds : it being adapted more to the attaining of Victory in Dispute, than the discovery or confirmation of Truth in fair Enquiries.

§. 5. But however it be in Knowledge, I think, I may truly say, it is of *far less, or no use at all in Probabilities*: for the Assent there, being to be determined by the preponderancy, after a due weighing of all the Proofs, with all Circumstances on both sides, nothing is so unfit to assist the Mind in that, as Syllogism; which running away with one assumed Probability, or one topical Argument, pursues that till it has led the Mind quite out of sight of the thing under Consideration; and forcing it upon some remote Difficulty, holds it fast there, intangled perhaps, and as it were, manacled in the Chain of Syllogisms, without allowing it the liberty, much less affording it the helps requisite to shew on which side, all Things considered, is the greater Probability.

§. 6. But let it help us (as, perhaps, may be said) in convincing Men of their Errors or Mistakes; (and yet I would fain see the Man, that was forced out of his Opinions by dint of *Syllogism*;) yet still it *fails our Reason* in that part, which if not its highest Perfection, is yet certainly its hardest Task, and that which we most need its help in; and that is *the finding out of Proofs, and making new Discoveries*. The Rules of Syllogism serve not to furnish the Mind with those intermediate *Ideas*, that may shew the connexion of remote ones. This way of reasoning discovers no new Proofs, but is the Art of marshalling, and ranging the old ones we have already. The 47th Proposition of the First Book of *Euclid* is very true; but the discovery of it, I think, not owing to any Rules of common Logick. A Man knows first, and then he is able to prove syllogistically. So that Syllogism comes after Knowledge, and then a Man has little or no need of it. But 'tis chiefly by the finding out those *Ideas* that shew the connexion of distant ones, that our stock of Knowledge is increased, and that useful Arts and Sciences are advanced. Syllogism, at best, is but the Art of fencing with the little Knowledge we have, without making any Addition to it: And if a Man should employ his Reason all this way, he will not doe much otherwise than he, who having got some Iron out of the Bowels of the Earth, should have it beaten up all into Swords, and put it into his Servants Hands to fence with, and bang one another. Had the King of *Spain* employ'd the Hands of his People, and his *Spanish* Iron so, he had brought to Light but little of that Treasure, that lay so long hid in the dark Entrails of *America*. And I am apt to think, that he who shall employ all the force of his Reason only in brandishing of Syllogisms, will discover very little of that Mass of Knowledge, which lies yet concealed in the secret recesses of Nature; and which I am apt to think, native rustick Reason (as it formerly has done) is likelier to open a way to, and add to the common stock of Mankind, rather than any scholastick Proceeding by the strict Rules of Mode and Figure.

§. 7. I doubt not nevertheless, but there are ways to be found to assist our Reason in this most useful part; and this the judicious *Hooker* encourages me to say, who in his *Eccl. Pol.* l. 1. c. 6. speaks thus: *If there might be added the right helps of true Art and Learning, (which helps I must plainly confess, this Age of the World carrying the Name of a learned Age, doth neither much know, nor generally regard,) there would undoubtedly be almost as much difference in Maturity of Judgment between Men therewith inured, and that which now Men are, as between Men that are now, and Innocents.* I do not pretend to have found, or discovered here any of those *right helps of Art*, this great Man of deep Thoughts mentions; but this is plain, that Syllogism, and the Logick now in Use, which were as well known in his days, can be none of those he means. It is sufficient for me, if by a Discourse, perhaps, something out of the way, I am sure as to me wholly

wholly new, and unborrowed, I shall have given Occasion to others, to cast about for new Discoveries, and to seek in their own Thoughts, for those *right Helps of Art*, which will scarce be found, I fear, by those who servilely confine themselves to the Rules and Dictates of others; for beaten Tracts lead these sort of Cattel, (as an observing *Roman* calls them,) whose Thoughts reach only to Imitation, *Non quo eundum est, sed quo itur*. But I can be bold to say, that this Age is adorned with some Men of that Strength of Judgment, and Largeness of Comprehension, that if they would employ their Thoughts on this Subject, could open new and undiscovered Ways, to the Advancement of Knowledge.

§. 8. Having here had Occasion to speak of Syllogism in general, and the Use of it, in Reasoning, and the Improvement of our Knowledge, 'tis fit, before I leave this Subject, to take notice of one manifest Mistake in the Rules of Syllogism; *viz.* That no Syllogistical Reasoning can be right, and conclusive, but what has, at least, one general Proposition in it. As if we could not *reason*, and have Knowledge about Particulars; whereas, in truth, the Matter rightly considered, the immediate Object of all our Reasoning and Knowledge, is nothing but Particulars. Every Man's Reasoning and Knowledge, is only about the *Ideas* existing in his own Mind, which are truly, every one of them, particular Existences; and our Knowledge and Reasoning about other Things, is only as they correspond with those our particular *Ideas*. So that the Perception of the Agreement, or Disagreement of our particular *Ideas*, is the whole and utmost of all our Knowledge: Universality is but accidental to it, and consists only in this, That the particular *Ideas*, about which it is, are such, as more than one particular Thing can correspond with, and be represented by. But the Perception of the Agreement, or Disagreement of any two *Ideas*, and consequently, our Knowledge, is equally clear and certain, whether either, or both, or neither of those *Ideas* be capable of representing more real Beings than one, or no.

§. 9. *Reason*, Though it penetrates into the Depths of the Sea and Earth, elevates our Thoughts as high as the Stars, and leads us through the vast Spaces, and large Rooms of this mighty Fabrick, yet it comes far short of the real Extent of even corporeal Being; and there are many Instances wherein it *fails us*: As,

First, It perfectly fails us, *where our Ideas fail*. It neither does, nor can extend it self farther than they do: and therefore, where-ever we have no *Ideas*, our Reasoning stops, and we are at an End of our Reckoning: And if at any time we reason about Words, which do not stand for any *Ideas*, 'tis only about those Sounds, and nothing else.

§. 10. *Secondly*, Our Reason is often puzzled, and at a loss, *because of the scarcity, Confusion, or Imperfection of the Ideas it is employed about*; and there we are involved in Difficulties and Contradictions. Thus, not having any perfect *Idea* of the least Extension of Matter, nor of Infinity, we are at a loss about the Divisibility of Matter; but having perfect, clear, and distinct *Ideas* of Number, our Reason meets with none of those inextricable Difficulties in Numbers, nor finds it self involved in any Contradictions about them. Thus, we having but imperfect *Ideas*, of the Operations of our Minds upon our Bodies or Thoughts; and of the Beginning of either Motion or Thought in us; and much imperfecter yet, of the Operation of GOD, run into great Difficulties about free, created Agents, which Reason cannot well extricate it self out of.

§. 11. *Thirdly*, Our Reason is often at a stand, *because it perceives not those Ideas, which could serve to shew the certain or probable Agreement, or Disagreement*

agreement of any two other Ideas; and in this, some Men's Faculties far out-go others. Till *Algebra*, that great Instrument and Instance of Humane Sagacity, was discovered, Men, with Amazement, looked on several of the Demonstrations of ancient Mathematicians, and could scarce forbear to think the finding some of those Proofs, more than humane.

§. 12. *Fourthly*, Reason is often engaged in Absurdities and Difficulties, brought into Straits and Contradictions, without knowing how to free it self, by proceeding upon false Principles; which, being followed, lead Men into Contradictions to themselves, and Inconsistency in their own Thoughts; which their Reason is so far from clearing, that if they will pursue it, it entangles them the more, and engages them deeper in Perplexities.

§. 13. *Fifthly*, As obscure and imperfect Ideas often involve our Reason, so, upon the same Ground, do dubious Words, and uncertain Signs, often, in Discourses and Arguings, when not warily attended to, puzzle Men's Reason, and bring them to a *Nonplus*. But these two latter are our Fault, and not the Fault of Reason: But yet, the Consequences of them are nevertheless obvious; and the Perplexities, or Errors, they fill Men's Minds with, is every where observable.

§. 14. Some of the Ideas that are in the Mind, are so there, that they can be, by themselves, immediately compared, one with another: And in these, the Mind is able to perceive, that they agree, or disagree, as clearly, as that it has them. Thus the Mind perceives, that an Arch of a Circle is less than the whole Circle, as clearly as it does the Idea of a Circle: And this, therefore, as has been said, I call *Intuitive Knowledge*; which is certain, beyond all Doubt, and needs no Probation, nor can have any; this being the highest of all Humane Certainty. In this consists the Evidence of all those *Æternæ Veritates*, which no Body has any Doubt about, but every Man (does not, as is said, only assent to, but) knows to be true, as soon as ever they are proposed to his Understanding. In the Discovery of, and Assent to these Truths, there is no Use of the discursive Faculty, no need of Reason; but they are known by a superior, and higher Degree of Evidence: And such, if I may guess at Things unknown, I am apt to think, that Angels have now, and the Spirits of just Men made perfect, shall have, in a future State, of Thousands of Things, which now, either wholly escape our Apprehensions, or which, our short-sighted Reason having got some faint Glimpse of, we, in the Dark, grope after.

§. 15. But though we have, here and there, a little of this clear Light, some Sparks of bright Knowledge; yet the greatest part of our Ideas are such, that we cannot discern their Agreement, or Disagreement, by an immediate Comparing them: And in all these, we have Need of our Reason; and must, by Discourse and Inference, make our Discoveries. Now of these, there are two sorts, which I shall take the liberty to mention here again.

First, Those whose Agreement, or Disagreement, though it cannot be seen by an immediate Putting them together, yet may be examined by the Intervention of other Ideas, which can be compared with them; wherein, if the Agreement, or Disagreement, be plainly discerned, of the intermediate Ideas on both sides, with those we would compare, there it is *Demonstration*; and it produces certain Knowledge, though not altogether so evident as the former: Because there is in the former, bare Intuition, but in these there is Intuition indeed, but not altogether at once; for there must be a Remembrance of the Intuition of the Agreement of the *Medium*, with that we compared it with before, when we compare

it with the other : and where there be many *Mediums*, there the danger of the Mistake is the greater, and consequently it may be liable to the greater uncertainty. But yet where the Mind clearly retains the Intuition it had of the Agreement of any *Idea* with another, and that with a third, and that with a fourth, &c. there the Agreement of the first and the fourth is a Demonstration, and produces certain Knowledge, which may be called Rational Knowledge, as the other is Intuitive.

§. 16. *Secondly*, There are other *Ideas*, whose Agreement, or Disagreement, can no otherwise be judged of, but by the intervention of others, which have not a certain Agreement with the Extremes, but an usual or likely one : and in these it is, that the *Judgment* is properly exercised, which is the acquiescing of the Mind, that any *Ideas* do agree, by comparing them with such probable *Mediums*. And this, though it never amounts to Knowledge, no not to that which is the lowest degree of it ; yet sometimes the intermediate *Ideas* tie the Extremes so firmly together ; and the Probability is so clear and strong, that Assent as necessarily follows it, as Knowledge does Demonstration. The great Excellency and Use of the Judgment, is to observe Right, and take a true estimate of the force and weight of each Probability ; and then casting them up all right together, chuse that side which has the over-balance.

§. 17. *Intuitive Knowledge*, is the perception of the certain Agreement, or Disagreement of two *Ideas* immediately compared together.

Rational Knowledge, is the perception of the certain Agreement, or Disagreement of any two *Ideas*, by the intervention of one or more other *Ideas*.

Judgment, is the thinking or taking two *Ideas* to agree, or disagree, by the intervention of one or more *Ideas*, whose certain agreement, or disagreement with them, it does not perceive, but hath observed to be frequent and usual.

§. 18. Though the deducing one Proposition from another, or making *Inferences in Words*, be a great part of Reason, and that which it is usually employ'd about : yet the principal Act of Ratiocination is the finding the Agreement, or Disagreement of two *Ideas* one with another, by the intervention of a third. As a Man, by a Yard, finds two Houses to be of the same length, which could not be brought together to measure their Equality by *juxta*-position. Words have their Consequences, as the signs of such *Ideas* : and Things, agree or disagree, as really they are ; but we observe it only by our *Ideas*.

§. 19. Before we quit this Subject, it may be worth our while a little to reflect on *four sorts of Arguments*, that Men in their Reasonings with others do ordinarily make use of, to prevail on their Assent ; or at least so to awe them, as to silence their Opposition.

First, The first is, to alledge the Opinions of Men, whose Parts, Learning, Eminency, Power, or some other cause, has gained a Reputation to, and settled in the common esteem with some kind of Authority. When Men are established in any kind of Dignity, 'tis thought a breach of Modesty for others to derogate any way from it, and question the Authority of Men who are in possession of it. This is apt to be censured, as carrying with it too much of Pride, when a Man does not readily vail to the Opinions of approved Authors, which have been received with respect and submission by others ; and 'tis looked upon as insolence, for a Man to set up, and adhere to his own Opinion, against the current stream of Antiquity, or to put it in the balance against that of some learned Doctor, or otherwise approved Writer. Whoever backs his Tenets with such

such Authorities, thinks he ought thereby to carry the Cause, and is ready to style it Impudence in any one who shall stand out against them. This, I think, may be called *Argumentum ad Verecundiam*.

Secondly, §. 20. Another way that Men ordinarily use to drive others, and force them to submit their Judgments, and receive the Opinion in debate, is to require the Adversary to admit what they alledge as a Proof, or to assign a better. And this I call *Argumentum ad Ignorantiam*.

§. 21. Thirdly, A third way is, to press a Man with Consequences drawn from his own Principles, or Concessions. This is already known under the Name of *Argumentum ad Hominem*.

§. 22. Fourthly, The fourth is, the using of Proofs drawn from any of the Foundations of Knowledge, or Probability. This I call *Argumentum ad Judicium*. This alone of all the four, brings true Instruction with it, and advances us in our way to Knowledge. For, 1. It argues not another Man's Opinion to be right, because I out of respect, or any other consideration, but that of conviction, will not contradict him. 2. It proves not another Man to be in the right way, nor that I ought to take the same with him, because I know not a better. 3. Nor does it follow, that another Man is in the right way, because he has shewn me, that I am in the wrong. I may be modest, and therefore not oppose another Man's Persuasion: I may be ignorant, and not be able to produce a better: I may be in an Errour, and another may shew me that I am so. This may dispose me, perhaps, for the reception of Truth, but helps me not to it: That must come from Proofs and Arguments, and light arising from the nature of Things themselves, and not from my Shamefacedness, Ignorance, or Errour.

§. 23. By what has been before said of Reason, we may be able to make some guess at the distinction of Things, into those that are according to, above, and contrary to Reason. 1. *According to Reason* are such Propositions, whose Truth we can discover, by examining and tracing those *Ideas* we have from *Sensation* and *Reflexion*; and by natural deduction, find to be true, or probable. 2. *Above Reason* are such Propositions, whose Truth or Probability we cannot by Reason derive from those Principles. 3. *Contrary to Reason* are such Propositions, as are inconsistent with, or irreconcilable to our clear and distinct *Ideas*. Thus the Existence of one GOD is according to Reason; the Existence of more than one GOD, contrary to Reason; the Resurrection of the Body after death, above Reason. Above Reason also may be taken in a double sense, *viz.* Above Probability, or above Certainty; and in that large sense also, Contrary to Reason, is, I suppose, sometimes taken.

§. 24. There is another use of the word Reason, wherein it is opposed to Faith: which though it be in it self a very improper way of speaking, yet common Use has so authorized it, that it would be folly either to oppose or hope to remedy it: Only I think it may not be amiss to take notice, that however Faith be opposed to Reason, Faith is nothing but a firm Assent of the Mind; which if it be regulated, as is our Duty, cannot be afforded to any thing but upon good Reason; and so cannot be opposite to it. He that believes, without having any Reason for believing, may be in love with his own Fancies; but neither seeks Truth as he ought, nor pays the Obedience due to his Maker, who would have him use those discerning Faculties he has given him, to keep him out of Mistake and Errour. He that does not this to the best of his power, however he sometimes lights on Truth, is in the right but by chance: and I know not whether the luckiness of the Accident, will excuse the irregularity of

his proceeding. This at least is certain, that he must be accountable for whatever Mistakes he runs into : whereas he that makes use of the Light and Faculties GOD has given him, and seeks sincerely to discover Truth, by those Helps and Abilities he has, may have this satisfaction in doing his Duty as a rational Creature, that though he should miss Truth, he will not miss the Reward of it. For he governs his Assent right, and places it as he should, who in any case or matter whatsoever, believes or disbelieves, according as Reason directs him. He that does otherwise, transgresses against his own Light, and misuses the Faculties which were given him to no other end, but to search and follow the clearer Evidence, and greater Probability. But since Reason and Faith are by some Men opposed, we will so consider them in the following Chapter.

C H A P. XVIII.

Of Faith and Reason, and their distinct Provinces.

§. 1. **I**T has been above shewn, 1. That we are of necessity ignorant, and want Knowledge of all sorts, where we want *Ideas*. 2. That we are ignorant, and want rational Knowledge, where we want Proofs. 3. That we want general Knowledge and Certainty, as far as we want clear and determined specifick *Ideas*. 4. That we want Probability to direct our Assent in matters where we have neither Knowledge of our own, nor Testimony of other Men to bottom our Reason upon.

From these things thus premised, I think we may come to lay down the measures and *boundaries between Faith and Reason*; the want whereof, may possibly have been the cause, if not of great Disorders, yet at least of great Disputes, and perhaps Mistakes in the World. For till it be resolved how far we are to be guided by Reason, and how far by Faith, we shall in vain dispute, and endeavour to convince one another in Matters of Religion.

§. 2. I find every Sect, as far as Reason will help them, make use of it gladly; and where it fails them, they cry out, *'Tis matter of Faith, and above Reason*. And I do not see how they can ever be convinced by any, who makes use of the same plea, without setting down strict boundaries between Faith and Reason; which ought to be the first point established in all Questions, where Faith has any thing to do.

Reason therefore here, as contradistinguished to *Faith*, I take to be the discovery of the Certainty or Probability of such Propositions or Truths, which the Mind arrives at by Deductions made from such *Ideas*, which it has got by the use of its natural Faculties, *viz.* by Sensation or Reflexion.

Faith, on the other side, is the Assent to any Proposition, not thus made out by the Deductions of Reason, but upon the Credit of the Proposer, as coming immediately from GOD; which we call Revelation.

§. 3. *First*, Then, I say, That *no Man inspired by GOD, can by any Revelation communicate to others any new simple Ideas* which they had not before from Sensation or Reflexion. For whatsoever impressions he himself may have from the immediate hand of GOD, this Revelation, if it be of new simple *Ideas*, cannot be conveyed to another, either by Words, or any other signs: because Words, by their immediate Operation on us,
cause

cause no other *Ideas*, but of their natural Sounds; and 'tis by the Custom of using them for Signs, that they excite, and revive in our Minds latent *Ideas*; but yet only such *Ideas*, as were there before. For Words seen or heard, recall to our Thoughts those *Ideas* only, which to us they have been wont to be Signs of: but cannot introduce any perfectly new simple *Ideas*, which were never there before. The same holds in all other Signs, which cannot signify to us Things, of which we have before never had any *Ideas* at all.

Thus whatever Things were discovered to St. *Paul*, when he was rapp'd up into the Third Heaven; whatever new *Ideas* his Mind there received, all the description he can make to others of that Place, is only this, That there are such Things, as *Eye hath not seen, nor Ear heard, nor hath it entered into the Heart of Man to conceive*. And, supposing God should discover to any one, supernaturally, a Species of Creatures inhabiting: For Example, *Jupiter*, or *Saturn* (for that it is possible there may be such, no body can deny) which had six Senses; and imprint on his Mind the *Ideas* convey'd to theirs by that sixth Sense, he could no more, by Words, produce in the Minds of other Men those *Ideas*, imprinted by that sixth Sense; than one of us could convey the *Idea* of any Colour, by the sound of Words into a Man, who having the other four Senses perfect, had always totally wanted the fifth of Seeing. For our simple *Ideas* then, which are the Foundation, and sole Matter of all our Notions, and Knowledge, we must depend wholly on our Reason, I mean, our natural Faculties; and can by no means receive them, or any of them from *Traditional Revelation*, I say, *Traditional Revelation*, in distinction to *Original Revelation*. By the one, I mean that first Impression, which is made immediately by GOD, on the Mind of any Man, to which, I pretend not to set any Bounds; and by the other, those Impressions delivered over to others in Words, and the ordinary ways of conveying our Conceptions one to another.

§.4. Secondly, I say, that *the same Truths may be discovered, and conveyed down from Revelation, which are discoverable to us by Reason*, and those clear *Ideas* we have. So God might, by Revelation, discover the Truth of any Proposition in *Euclid*, as well as Men, by the natural use of their Faculties, come to make the discovery themselves. In all Things of this Nature, there is little need or use of Revelation, GOD having furnished us with natural, and surer means to arrive at the Knowledge of them. For whatsoever Truth we come to the discovery of, from the Knowledge and Contemplation of our own clear *Ideas*, will always be certainer to us, than those which are conveyed to us by *Traditional Revelation*: for the Knowledge we have, that this Revelation came at first from GOD, can never be so sure, as the Knowledge we have from our own clear and distinct *Ideas*. As if it were revealed some Ages since, That the three Angles of a Triangle were equal to two right ones, I might assent to the Truth of that Proposition, upon the Credit of the Tradition, that it was revealed: but that would never amount to so great a Certainty, as the Knowledge of it, upon the comparing and measuring my own clear *Ideas* of two right Angles, and the three Angles of a Triangle. The like holds in Matter of Fact, knowable by our Senses; *v. g.* the History of the Deluge is conveyed to us by Writings, which had their Original from Revelation: and yet no body, I think, will say, he has as certain and clear a Knowledge of the Flood, as *Noah* that saw it; or that he himself would have had, had he then been alive, and seen it. For he has no greater an assurance than that of his Senses, that it is writ in the Book supposed writ by

by *Moses*: but he has not so great an assurance, that *Moses* writ that Book, as if he had seen *Moses* write it; so that the assurance of its being a Revelation, is less still than the assurance of his Senses.

§. 5. In Propositions then, whose Certainty is built upon clear, and perfect *Ideas*, and evident Deductions of Reason, we need not the assistance of Revelation, as necessary to gain our Assent, and introduce them into our Minds. Because the natural ways of Knowledge could settle them there, or had done it already, which is the greatest assurance we can possibly have of any thing, unless where God immediately reveals it to us: and there too our Assurance can be no greater than our Knowledge is, that it is a Revelation from God. But yet nothing, I think, can under that Title, shake or over-rule plain Knowledge, nor rationally prevail with any Man, to admit it for true, in a direct contradiction to the clear Evidence of his own Understanding. For since no Evidence of our Faculties, by which we receive such Revelations, can exceed, if equal, the Certainty of our intuitive Knowledge, we can never receive for a Truth, any thing that is directly contrary to our clear and distinct Knowledge; *v. g.* The *Idea* of one Body, and one Place, does so clearly agree; and the Mind has so evident a Perception of it, that we can never assent to a Proposition, that affirms the same Body to be in two distant Places at once, however it should pretend to the Authority of a divine Revelation, since the Evidence; *First*, That we deceive not our selves in ascribing it to GOD; *Secondly*, That we understand it right, can never be so great, as the Evidence of our own intuitive Knowledge, whereby we discern it impossible, for the same Body to be in two Places at once. And therefore, *no Proposition can be received for divine Revelation*, or obtain the Assent due to all such, *if it be contradictory to our clear intuitive Knowledge*. Since this would be to subvert the Principles, and Foundations of all Knowledge, Evidence, and Assent whatsoever; and leave no difference between Truth and Falshood; no measures of Credible and Incredible in the World, if doubtful Propositions shall take place before self-evident; and what we certainly know, give way to what we may possibly be mistaken in. In Propositions therefore contrary to our distinct and clear *Ideas*, 'twill be in vain to urge them as Matters of Faith. They cannot move our Assent under that, or any other Title whatsoever. For Faith can never convince us of any thing, that contradicts our Knowledge. Because though Faith be founded on the Testimony of God, (revealing any Proposition to us,) who cannot lie; yet we cannot have an assurance of the Truth of its being a divine Revelation, greater than our own Knowledge: since the whole strength of the Certainty depends upon our Knowledge, that God revealed it, which in this Case, where the Proposition suppos'd reveal'd, contradicts our Knowledge or Reason, will always have this Objection hanging to it, (*viz.*) that we cannot tell how to conceive, that to come from GOD, the bountiful Author of our Being, which if received for true, must overturn all our Principles and Foundations of Knowledge; render all our Faculties useless; wholly destroy the most excellent part of his Workmanship, our Understandings; and put a Man in a Condition, wherein he will have less Light, less Conduct than the Beast that perisheth. For if the Mind of Man can never have a clearer (and, perhaps, not so clear) an Evidence of any thing to be a divine Revelation, as it has of the Principles of its own Reason, it can never have a ground to quit the clear Evidence of its Reason, to give place to a Proposition, whose Revelation has not a greater Evidence.

§. 6. Thus far a Man has use of Reason, and ought to hearken to it, even in immediate and original Revelation, where it is supposedly made to himself: But to all those who pretend not to immediate Revelation but are required to pay Obedience, and to receive the Truths revealed to others, which, by the Tradition of Writings, or Word of Mouth, are conveyed down to them, Reason has a great deal more to do, and is that only which can induce us to receive them. For Matter of Faith being only Divine Revelation, and nothing else, Faith, as we use the Word, (called commonly, Divine Faith) has to do with no Propositions, but those which are supposed to be divinely revealed. So that I do not see how those, who make Revelation alone the sole Object of Faith, can say, that it is a Matter of Faith, and not of Reason, to believe, that such or such a Proposition, to be found in such or such a Book, is of Divine Inspiration; unless it be revealed, that that Proposition, or all in that Book, was communicated by Divine Inspiration. Without such a Revelation, the believing, or not believing that Proposition, or Book, to be of Divine Authority, can never be Matter of Faith, but Matter of Reason; and such as I must come to an Assent to, only by the use of my Reason, which can never require or enable me to believe that, which is contrary to it self: it being impossible for Reason, ever to procure any Assent to that, which to it self appears unreasonable.

In all Things therefore, where we have clear Evidence from our *Ideas*, and those Principles of Knowledge, I have above mentioned, Reason is the proper Judge; and Revelation, though it may in consenting with it, confirm its Dictates, yet cannot, in such Cases, invalidate its Decrees: *Nor can we be obliged, where we have the clear and evident Sentence of Reason, to quit it, for the contrary Opinion, under a Pretence that it is Matter of Faith.*

§. 7. But *Thirdly*, There being many Things, wherein we have very imperfect Notions, or none at all; and other Things, of whose past, present, or future Existence, by the natural Use of our Faculties, we can have no Knowledge at all; these, as being beyond the Discovery of our natural Faculties, and above Reason, are, when revealed, *the proper Matter of Faith*. Thus that part of the Angels rebelled against GOD, and thereby lost their first happy State: And that the Bodies of Men shall rise, and live again: These, and the like, being beyond the Discovery of Reason, are purely Matters of Faith; with which, Reason has, directly, nothing to do.

§. 8. But since all Things that are under the Character of Divine Revelation, are esteemed Matter of Faith; and there are amongst them, several Things, that fall under the *Examen* of Reason; and are such as we could judge of by our natural Faculties, without a Supernatural Revelation. In these, *Revelation must carry it, against the probable Conjectures of Reason*: because the Mind, not being certain of the Truth of that it does not evidently know, but is only probably convinced of, is bound to give up its Assent to such a Testimony, which, it is satisfied, comes from one who cannot err, and will not deceive. But yet, it still belongs to Reason, to judge of the Truth of its being a Revelation, and of the signification of the Words wherein it is delivered. Indeed, if any thing shall be thought Revelation, which is contrary to the plain Principles of Reason, and the evident Knowledge the Mind has of its own clear and distinct *Ideas*; there Reason must be hearkned to, as to a Matter within its Province: since a Man can never have so certain a Knowledge, that a Proposition which contradicts the clear Principles and Evidence of his own Knowledge, was divinely

divinely revealed, or that he understands the Words rightly, wherein it is delivered, as he has, that the Contrary is true, and so is bound to consider and judge of it as a Matter of Reason, and not swallow it, without Examination, as a Matter of Faith.

§. 9. The Summ of all is,

First, Whatever Proposition is revealed, of whose Truth, our Mind, by its natural Faculties and Notions, cannot judge, that is purely *Matter of Faith*, and above Reason.

Secondly, All Propositions, whereof the Mind, by the use of its natural Faculties, can come to determine and judge, from natural acquired *Ideas*, are *Matter of Reason*; with this difference still, that in those, concerning which it has but an uncertain Evidence, and so is persuaded of their Truth, only upon probable Grounds, which still admit a Possibility of the Contrary to be true, without doing Violence to the certain Evidence of its own Knowledge, and overturning the Principles of all Reason: In such probable Propositions, I say, an evident Revelation ought to determine our Assent even against Probability. For where the Principles of Reason have not determined a Proposition to be certainly true or false, there clear Revelation, as another Principle of Truth, and Ground of Assent, may determine; and so it may be Matter of Faith, and be also above Reason. Because Reason, in that particular Matter, being able to reach no higher than Probability, Faith gave the Determination, where Reason came short; and Revelation discovered on which side the Truth lay.

§. 10. Thus far the Dominion of Faith reaches, and that without any violence, or hindrance to Reason; which is not injured, or disturbed, but assisted and improved, by new Discoveries of Truth, coming from the Eternal Fountain of all Knowledge. Whatever GOD hath revealed, is certainly true; no Doubt can be made of it. This is the proper Object of Faith: But whether it be a divine Revelation, or no, Reason must judge; which can never permit the Mind to reject a greater Evidence to embrace what is less evident, nor prefer less Certainty to the greater. There can be no Evidence, that any traditional Revelation is of divine Original, in the Words we receive it, and in the Sense we understand it, so clear, and so certain as those of the Principles of Reason: And therefore, *Nothing that is contrary to, and inconsistent with the clear and self-evident Dictates of Reason, has a Right to be urged, or assented to, as a Matter of Faith, wherein Reason hath nothing to do.* Whatsoever is divine Revelation, ought to over-rule all our Opinions, Prejudices, and Interests, and hath a Right to be received with a full Assent: Such a Submission as this of our Reason to Faith, takes not away the Land-marks of Knowledge: This shakes not the Foundations of Reason, but leaves us that Use of our Faculties, for which they were given us.

§. 11. *If the Provinces of Faith and Reason are not kept distinct by these Boundaries*, there will, in matter of Religion, be no more for Reason at all; and those extravagant Opinions and Ceremonies, that are to be found in the several Religions of the World, will not deserve to be blamed: For, to this crying up of Faith, in opposition to Reason, we may, I think, in good measure, ascribe those Absurdities, that fill almost all the Religions which possess and divide Mankind. For Men having been principled with an Opinion, that they must not consult Reason in the Things of Religion, however apparently contradictory to common Sense, and the very Principles of all their Knowledge, have let loose their Fancies, and natural Superstition, and have been, by them, lead into so strange Opinions, and extravagant Practices in Religion, that a considerate Man
cannot

cannot but stand amazed at their Follies, and judge them so far from being acceptable to the great and wise GOD, that he cannot avoid thinking them ridiculous, and offensive to a sober, good Man. So that, in effect, that which most properly ought to distinguish us from Beasts, that wherein we are elevated, as rational Creatures, above Brutes; in that we appear most irrational, and more senseless than Beasts themselves. *Credo; quia impossibile est: I believe, because it is impossible*, might, in a good Man, pass for a Sally of Zeal; but would prove a very ill Rule for Men to chuse their Opinions, or Religion by.

C H A P. XIX.

Of Wrong Assent, or Error.

§. 1. **K**nowledge being to be had only of visible certain Truth, *Error* is not a Fault of our Knowledge, but a Mistake of our Judgment giving Assent to that, which is not true.

But if Assent be grounded on Likelihood, if the proper Object and Motive of our Assent be Probability, and that Probability consist in what is laid down in the foregoing Chapters, it will be demanded, how Men come to give their Assents contrary to Probability: For there is nothing more common, than Contrariety of Opinions; nothing more obvious, than that one Man wholly disbelieves what another only doubts of, and a third stedfastly believes, and firmly adheres to. The Reasons whereof, though they may be very various, yet, I suppose, may all be reduced to these four.

1. *Want of Proofs.*
2. *Want of Ability to use them.*
3. *Want of Will to use them.*
4. *Wrong Measures of Probability.*

§. 2. *First*, By *Want of Proofs*: I do not mean, only the Want of those Proofs which are no where extant, which are no where to be had; but the Want even of those Proofs which are in Being, or might be procured. And thus Men want Proofs, who have not the Convenience, or Opportunity to make Experiments and Observations themselves, tending to the Proof of any Proposition; nor likewise the Convenience to enquire into, and collect the Testimonies of others: And in this State are the greatest part of Mankind, who are given up to Labour, and enslaved to the Necessity of their mean Condition; whose Lives are worn out, only in the Provisions for Living. These Men's Opportunity of Knowledge and Enquiry, are commonly as narrow as their Fortunes; and their Understandings are but little instructed, when all their whole Time and Pains is laid out, to still the Croaking of their own Bellies, or the Cries of their Children. 'Tis not to be expected, that a Man, who drudges on, all his Life, in a laborious Trade, should be more knowing in the Variety of Things done in the World, than a Pack-horse, who is driven constantly forwards and backwards, in a narrow Lane, and dirty Road, only to Market, should be skilled in the Geography of the Country. Nor is it at all more possible, that he who wants Leisure, Books, and Languages, and the Opportunity of Conversing with Variety of Men, should be in a Condition to collect those Testimonies and Observations which are in Being, and are necessary

necessary to make out many, nay, most of the Propositions, that in the Societies of Man, are judged of the greatest Moment; or to find out Grounds of Assurance so great, as the Belief of the Points he would build on them, is thought necessary. So that a great part of Mankind are, by the natural and unalterable State of Things in this World, and the Constitution of humane Affairs, unavoidably given over to invincible Ignorance of those Proofs, on which others build, and which are necessary to establish those Opinions: The greatest part of Men, having much to do to get the Means of Living, are not in a Condition to look after those of learned and laborious Enquiries.

§. 3. What shall we say then? Are the greatest part of Mankind, by the necessity of their Condition, subjected to unavoidable Ignorance in those Things, which are of greatest Importance to them? (for of those, 'tis obvious to enquire?) Have the Bulk of Mankind no other Guide, but Accident, and blind Chance, to conduct them to their Happiness, or Misery? Are the current Opinions, and licensed Guides of every Country sufficient Evidence and Security to every Man, to venture his greatest Concernments on; nay, his everlasting Happiness, or Misery? Or can those be the certain and infallible Oracles and Standards of Truth, which teach one Thing in *Christendom*, and another in *Turkey*? Or shall a poor Country-man be eternally happy, for having the Chance to be born in *Italy*; or a Day-Labourer be unavoidably lost, because he had the ill Luck to be born in *England*? How ready some Men may be to say some of these Things, I will not here examine; but this I am sure, that Men must allow one or other of these to be true, (let them chuse which they please;) or else grant, that GOD has furnished Men with Faculties sufficient to direct them in the Way they should take, if they will but seriously employ them that Way, when their ordinary Vocations allow them the Leisure. No Man is so wholly taken up with the Attendance on the Means of Living, as to have no spare Time at all to think on his Soul, and inform himself in Matters of Religion. Were Men as intent upon this, as they are on Things of lower Concernment, there are none so enslaved to the Necessity of Life, who might not find many Vacancies, that might be husbanded to this Advantage of their Knowledge.

§. 4. Besides those, whose Improvements and Informations are straitened by the narrowness of their Fortunes, there are others, whose largeness of Fortune would plentifully enough supply Books, and other Opportunities of clearing of Doubts, and discovering of Truth: But they are *cooped in close, by the Laws* of their Countries, and the strict Guards of those, whose Interest it is to keep them ignorant, lest, knowing more, they should believe the less in them, that they are as far, nay farther, *from the Liberties and Opportunities of a fair Enquiry*, than those poor and wretched Labourers we before spoke of. These Men, however they may seem high and great, are confined to narrowness of Thought, and enslaved in that which should be the freest part of Man, their Understandings. This is generally the Case of all those, who live in Places where Care is taken to propagate Truth, without Knowledge; where Men are forced, at a venture, to be of the Religion of the Country; and must therefore swallow down Opinions, as silly People do Empiricks Pills, without knowing what they are made of, or how they will work, and have nothing to do, but believe that they will do the Cure; but in this, are much more miserable than they, in that they are not at liberty to refuse swallowing what, perhaps, they had rather let alone; or to chuse the Physician, to whose Conduct they would trust themselves.

§. 5. Secondly,

§. 5. *Secondly*, Those that *want skill to use those Evidences they have* of Probabilities, that cannot carry a train of Consequences in their Heads, nor weigh exactly the preponderancy of contrary Proofs and Testimonies, making every Circumstance its due allowance, may be easily misled to assent to Positions that are not probable. There are some Men of one, some but of two Syllogisms, and no more; and others that can but advance one step farther. These cannot always discern that side on which the strongest Proofs lie, cannot constantly follow that which in its self is the more probable Opinion. Now that there is such a difference between Men, in respect of their Understandings, I think no body will question, who has had any Conversation with his Neighbours, though he never was at *Westminster-Hall* or the *Exchange* on the one hand, nor at *Alms-Houses* or *Bedlam* on the other; which great difference in Men's Intellectuals, whether it rises from any defect in the Organs of the Body, particularly adapted to Thinking, or in the dulness or untractableness of those Faculties, for want of use; or, as some think, in the natural differences of Men's Souls themselves, or some or all of these together, it matters not here to examine: Only this is evident, that there is a difference of degrees in Men's Understandings, Apprehensions, and Reasonings, to so great a latitude, that one may, without doing injury to Mankind, affirm, that there is a greater distance between some Men and others in this respect, than between some Men and some Beasts. But how this comes about, is a Speculation, though of great consequence, yet not necessary to our present purpose.

§. 6. *Thirdly*, There are another sort of People that *want Proofs*, not because they are out of their reach, but *because they will not use them*: Who though they have Riches and leisure enough, and want neither Parts nor Learning, may, yet through their hot pursuit of Pleasure, or Business, or else out of laziness or fear, that the Doctrines, whose Truth they should enquire into, would not suit well with their Opinions, Lives, or Designs, may never come to the knowledge of, nor give their Assent to those Probabilities which lie so much within their view, that to be convinced of them, they need but turn their Eyes that way: But we know some Men will not read a Letter, which is supposed to bring ill news; and many Men forbear to cast up their Accompts, or so much as think upon their Estates, who have reason to fear their Affairs are not in a very good posture. How Men, whose plentiful Fortunes allow them leisure to improve their Understandings, can satisfy themselves with a lazy ignorance, I cannot tell: But methinks they have a low Opinion of their Souls, who lay out all their Incomes in Provisions for the Body, and employ none of it to procure the Means and Helps of Knowledge; who take great care to appear always in a neat and splendid outside, and would think themselves miserable in coarse Cloaths, or a patched Coat, and yet contentedly suffer their Minds to appear abroad in a pie-bald Livery of course Patches, and borrowed Shreds, such as it has pleased Chance, or their Country-Tailor, I mean the common Opinion of those they have conversed with, to cloath them. I will not here mention how unreasonable this is for Men that ever think of a future state, and their concernment in it, which no rational Man can avoid to do sometimes: nor shall I take notice what a shame and confusion it is, to the greatest Contemners of Knowledge, to be found ignorant in Things they are concerned to know. But this, at least, is worth the consideration of those who call themselves Gentlemen, That however they may think Credit, Respect, Power, and Authority the Concomitants of their Birth and Fortune, yet they will

find all these still carried away from them, by Men of lower Condition, who surpass them in Knowledge. They who are blind, will always be led by those that see, or else fall into the Ditch; and he is certainly the most subjected, the most enslaved, who is so in his Understanding. In the foregoing instances, some of the Causes have been shewn of wrong Assent, and how it comes to pass, that probable Doctrines are not always received with an Assent proportionable to the Reasons, which are to be had for their Probability; but hitherto it has been only of such Probabilities, whose Proofs do only exist, but do not appear to him that embraces the Error.

§. 7. *Fourthly*, There remains yet the last sort, who even where the real Probabilities appear, and are plainly laid before them, yet do not admit of the conviction, nor yield unto manifest Reasons, but do either *ἰσχυρῶς*, suspend their Assent, or give it to the less probable Opinion. And to this danger are those exposed, who have taken up *wrong measures of Probability*, which are,

1. *Propositions that are not in themselves certain and evident, but doubtful and false, taken up for Principles.*

2. *Received Hypotheses.*

3. *Predominant Passions or Inclinations.*

4. *Authority.*

§. 8. *First*, The first and firmest ground of Probability, is the conformity any thing has to our own Knowledge; especially that part of our Knowledge which we have embraced, and continue to look on as Principles. These have so great an influence upon our Opinions, that 'tis usually by them we judge of Truth; and measure Probability to that degree, that what is inconsistent with our Principles, is so far from passing for probable with us, that it will not be allowed possible. The reverence is born to these Principles is so great, and their Authority so paramount to all other, that the Testimony not only of other Men, but the Evidence of our own Senses are often rejected, when they offer to vouch any thing contrary to these established Rules. How much the Doctrine of innate Principles, and that Principles are not to be proved or questioned, has contributed to this, I will not here examine: This I readily grant, that one Truth cannot contradict another; but withal I take leave also to say, that every one ought very carefully to beware what he admits for a Principle; to examine it strictly, and see whether he certainly knows it to be true of it self by its own evidence, or whether he does only with assurance believe it to be so, upon the Authority of others. For he hath a strong bias put into his Understanding, which will unavoidably misguide his Assent, who hath imbibed *wrong Principles*, and has blindly given himself up to the Authority of any Opinion in it self not evidently true.

§. 9. There is nothing more ordinary, than that *Children* should receive into their Minds Propositions (especially about Matters of Religion) from their Parents, Nurses, or those about them; which being insinuated into their unwary, as well as unbiass'd Understandings, and fastened by degrees, are at last (equally, whether true or false) rivited there by long Custom and Education, beyond all possibility of being pull'd out again. For Men, when they are grown up, reflecting upon their Opinions, and finding those of this sort to be as ancient in their Minds as their very Memories, not having observed their early insinuation, nor by what means they got them, they are apt to reverence them as sacred Things, not to suffer them to be profaned, touched, or questioned, but look on them as the *Urim* and *Thummim* set up in their Minds immediately by

GOD

GOD Himself, to be the great and unerring Deciders of Truth and Falshood, and the Judges to which they are to appeal in all manner of Controversies.

§. 10. This Opinion of his *Principles* (let them be what they will) being *once established in any one's Mind*, it is easie to be imagined what reception any Proposition shall find, how clearly soever proved, that shall invalidate their Authority, or at all thwart with these internal Oracles; whereas the grossest Absurdities and Improbabilities, being but agreeable to such Principles, go down glibly, and are easily digested. The great obstinacy, that is to be found in Men firmly believing quite contrary Opinions, though many times equally absurd, in the various Religions of Mankind, are as evident a Proof, as they are an unavoidable consequence of this way of Reasoning from received traditional Principles: So that Men will disbelieve their own Eyes, renounce the Evidence of their Senses, and give their own Experience the lye, rather than admit of any thing disagreeing with these sacred Tenets. Take an intelligent *Romanist*, that from the very first dawning of any Notions in his Understanding, hath had this Principle constantly inculcated, *viz.* That he must believe as the Church believes, or that the Pope is Infallible: and this he never so much as heard questioned, till at forty or fifty years old he met with one of other Principles: How is he prepared easily to swallow, not only against all Probability, but even the clear Evidence of his Senses, the Doctrine of Transubstantiation, and will believe that to be Flesh, which he sees to be Bread? And what way will you take to convince a Man of any improbable Opinion he holds, who, with some Philosophers, hath laid down this as a foundation of Reasoning, That he must believe his Reason (for so Men improperly call Arguments drawn from their Principles) against their Senses? Let an Enthusiast be principled, that he or his Teacher is inspired, and acted by an immediate Communication of the Divine Spirit; and you in vain bring the Evidence of clear Reasons against his Doctrines. Whoever therefore have imbibed wrong Principles, are not, in Things inconsistent with these Principles, to be moved by the most apparent and convincing Probabilities, till they are so candid and ingenuous to themselves, as to be persuaded to examine even those very Principles, which many never suffer themselves to do.

§. 11. *Secondly*, Next to these, are Men whose Understandings are cast into a Mold, and fashioned just to the size of a *received Hypothesis*. The difference between these and the former, is, that they will admit of matter of Fact, and agree with Dissenters in that; but differ only in assigning of Reasons, and explaining the manner of Operation. These are not at that open defiance with their Senses, as the former; they can endure to hearken to their Intelligence a little more patiently: but will by no means admit of their Reports, in the Explanation of Things, nor be prevailed on by Probabilities which would convince them that Things are not brought about just after the same manner, that they have decreed within themselves that they are. Would it not be an insufferable a thing for a learned Professor, and that which his Scarlet would blush for, to have his Authority of forty years standing wrought out of hard Rock Greek and Latin, with no small expence of Time and Candle, and confirmed by general Tradition, and a reverend Beard, in an instant overturned by an upstart Novelist; and he made to confess, That what he taught his Scholars thirty years ago, was all Errour and Mistake; and that he sold them hard Words and Ignorance at a very dear rate? What Probabilities, I say, are sufficient to prevail in such a case? And who ever by the most cogent Arguments will

will be prevailed with, to disrobe himself at once of all his old Opinions, and Pretences to Knowledge and Learning, which with hard Study, he hath all his Time been labouring for, and turn himself out stark naked, in quest a-fresh of new Notions? All the Arguments can be used, will be as little able to prevail, as the Wind did with the Traveller, to part with his Cloak, which he held only the faster. To this of wrong Hypothesis, may be reduced the Errors, that may be occasioned by a true Hypothesis, or right Principles, but not rightly understood. There is nothing more familiar than this, The Instances of Men, contending for different Opinions, which they all derive from the infallible Truth of the Scripture, are an undeniable Proof of it. All that call themselves Christians, allow the Text, that says, *μὴ ἀκούετε*, to carry in it the Obligation to a very weighty Duty. But yet how erroneous will one of their Practices be, who understanding nothing but the *French*, take this Rule with one Translation to be *repentez vous*, repent; or with the other, *faitez Penitence*, do Penance.

§. 12. *Thirdly*, Probabilities, which cross Men's Appetites, and prevailing Passions, run the same Fate. Let never so much Probability hang on one side of a covetous Man's Reasoning, and money on the other; and it is easie to foresee which will out-weigh. Earthly Minds, like Mud-Walls, resist the strongest Batteries: and though, perhaps, sometimes the force of a clear Argument may make some Impression, yet they nevertheless stand firm, keep out the Enemy Truth, that would captivate, or disturb them. Tell a Man, passionately in Love, that he is gilty; bring a score of Witnesses of the Falshood of his Mistress, 'tis ten to one but three kind Words of hers, shall invalidate all their Testimonies. *Quod volumus, facile credimus*; what suits our Wishes, is forwardly believed, is, I suppose, what every one hath more than once experimented: and though Men cannot always openly gain-say, or resist the force of manifest Probabilities, that make against them; yet yield they not to the Argument. Not but that it is the Nature of the Understanding constantly to close with the more probable side, but yet a Man hath a Power to suspend and restrain its Enquiries, and not permit a full and satisfactory Examination, as far as the Matter in Question is capable, and will bear it to be made. Until that be done, there will be always these two ways left of evading the most apparent Probabilities.

§. 13. *First*, That the Arguments being (as for the most part they are) brought in Words, there may be a Fallacy latent in them: and the Consequences being, perhaps, many in Train, they may be some of them incoherent. There be very few Discourses, are so short, clear and consistent, to which most Men may not, with satisfaction enough to themselves, raise this doubt; and from whose conviction they may not, without reproach of Disingenuity or Unreasonableness, set themselves free with the old Reply, *Non persuadebis, etiam si persuaseris*; though I cannot answer, I will not yield.

§. 14. *Secondly*, Manifest Probabilities may be evaded, and the Assent withheld upon this Suggestion, That I know not yet all that may be said on the contrary side; and therefore though he be beaten, 'tis not necessary he should yield, not knowing what Forces there are in reserve behind. This is a refuge against Conviction so open and so wide, that it is hard to determine, when a Man is quite out of the Verge of it.

§. 15. But yet there is some end of it, and a Man having carefully enquired into all the grounds of Probability and Unlikeliness; done his utmost to inform himself in all Particulars fairly; and cast up the whole
Summ

Summ on both sides, may in most Cases come to acknowledge, upon the whole Matter, on which side the Probability rests: wherein some Proofs in Matters of Reason, which are supposititious upon universal Experience, are so cogent and clear; and some Testimonies in Matters of Fact so universal, that he cannot refuse his Assent. So that, I think, we may conclude, that in Propositions, where though the Proofs in view are of most Moment, yet there are sufficient grounds, to suspect that there is either Fallacy in Words, or certain Proofs, as considerable, to be produced on the contrary side, there Assent, Suspense, or Dissent, are oft voluntary Actions: But *where* the Proofs are such, as make it highly probable, and there is not sufficient ground to suspect, that there is either Fallacy of Words, (which sober and serious Consideration may discover,) nor equally valid Proofs yet undiscovered latent on the other side, (which also the Nature of the thing, may, in some Cases, make plain to a considerate Man,) there, I think, *a Man*, who has weighed them, *can scarce refuse his Assent* to the side, on which the greater Probability appears. Whether it be probable, that a promiscuous jumble of printing Letters should often fall into a Method and Order, which should stamp in Paper a coherent Discourse; or that a blind fortuitous concourse of Atoms, not guided by an understanding Agent, should frequently constitute the Bodies of any Species of Animals; in these and the like Cases, I think, no Body that considers them, can be one jot at a stand which side to take, nor at all waver in his Assent. Lastly, when there can be no Supposition, (the thing in its own Nature indifferent, and wholly depending upon the Testimony of Witnesses,) that there is as fair Testimony against, as for the Matter of Fact attested; which by Enquiry, is to be learned, *v. g.* whether there was 1700 years ago such a Man at *Rome* as *Julius Cæsar*: In all such Cases, I say, I think it is not in any rational Man's Power to refuse his Assent; but that it necessarily follows, and closes with such Probabilities. In other less clear Cases, I think, it is in a Man's Power to suspend his Assent; and, perhaps, content himself with the Proofs he has, if they favour the Opinion that suits with his Inclination, or Interest, and so stop from farther search. But that a Man should afford his Assent to that side, on which the less Probability appears to him, seems to me utterly impracticable, and as impossible, as it is to believe the same thing probable and improbable at the same time.

§. 16. As Knowledge, is no more arbitrary than Perception; so, I think, Assent is no more in our Power than Knowledge. When the Agreement of any two *Ideas* appear to our Minds, whether immediately, or by the Assistance of Reason, I can no more refuse to perceive, no more avoid knowing it, than I can avoid seeing those Objects, which I turn my Eyes to, and look on in day-light: And what upon full Examination I find the most probable, I cannot deny my Assent to. But though we cannot hinder our Knowledge, where the Agreement is once perceived by our Minds; nor our Assent, where the Probability manifestly appears upon due Consideration of all the Measures of it: Yet *we can hinder both Knowledge and Assent, by stopping our Enquiry*, and not employing our Faculties in the search of any Truth: if it were not so, Ignorance, Error, or Infidelity could not in any Case be a Fault. Thus in some Cases, we can prevent or suspend our Assent: But can a Man, versed in modern or ancient History, doubt whether there be such a Place as *Rome*, or whether there was such a Man as *Julius Cæsar*? Indeed there are millions of Truths, that a Man is not, or may not think himself concerned to know; as whether *Richard* the Third was crook-back'd, or no; or whether *Roger Bacon*

Bacon was a Mathematician, or a Magician : In these and such like Cases, where the Assent one way or other, is of no Importance to the Interest of any one, no Action, no Concernment of his following, or depending thereon, there 'tis not strange, that the Mind should give it self up to the common Opinion, or render it self to the first Comer. These and the like Opinions, are of so little weight and moment, that like Motes in the Sun, their Tendencies are very rarely taken notice of. They are there, as it were, by Chance, and the Mind lets them float at liberty. But where the Mind judges, the Proposition has Concernment in it, where the Assent, or not Assenting, is thought to draw Consequences after it of moment, and Good or Evil to depend on chusing, or refusing the right side, and the Mind sets it self seriously to enquire, and examine the Probability ; there, I think, it is not in our Choice, to take which side we please, if manifest odds appears on either : The greater Probability, I think, in that Case, will determine the Assent ; and a Man can no more avoid assenting, or taking it to be true, where he perceives the greater Probability, than he can avoid knowing it to be true, where he perceives the Agreement or Disagreement of any two *Ideas*.

If this be so, the Foundation of Error will lie in wrong Measures of Probability ; as the Foundation of Vice, in wrong Measures of Good.

§. 17. *Fourthly*, The fourth and last *wrong Measure of Probability* I shall take notice of, and which keeps in Ignorance, or Error, more People than all the other together, is that which I have mentioned in the fore-going Chapter, I mean, the *giving up our Assent to the common received Opinions*, either of our Friends, or Party ; Neighbourhood, or Country. How many Men have no other ground for their Tenets, than the supposed Honesty, or Learning, or Number of those of the same Profession : As if honest, or bookish Men could not err, or Truth were to be established by the Vote of the Multitude ; yet this with most Men serves the Turn. The Tenet has had the attestation of reverend Antiquity ; it comes to me with the Pass-port of former Ages, and therefore I am secure in the Reception I give it : other Men have been, and are of the same Opinion, (for that is all is said,) and therefore it is reasonable for me to embrace it. A Man may more justifiably throw up Cross and Pile for his Opinions, than take them up by such Measures. All Men are liable to Error, and most Men are in many Points, by Passion or Interest, under Temptation to it. If we could but see the secret motives, that influenced the Men of Name and Learning in the World, and the Leaders of Parties, we should not always find, that it was the embracing of Truth for its own sake, that made them espouse the Doctrines, they owned and maintained. This at least is certain, there is not an Opinion so absurd, which a Man may not receive upon this ground. There is no Error to be named, which has not had its Professors : And a Man shall never want crooked Paths to walk in, if he thinks he is in the right way, where-ever he has the Foot-steps of others to follow.

§. 18. But notwithstanding the great Noise is made in the World about Errors and Opinions, I must do Mankind that Right, as to say, *There are not so many Men in Errors, and wrong Opinions, as is commonly supposed*. Not that I think they embrace the Truth ; but indeed, because concerning those Doctrines they keep such a stir about, they have no Thought, no Opinion at all. For if any one should a little catechise the greatest part of the Partisans of most of the Sects in the World, he would not find, concerning those Matters they are so zealous for, that they have any Opinions of their own : much less would he have Reason to think, that they
took

took them upon the Examination of Arguments, and Appearance of Probability. They are resolved to stick to a Party, that Education or Interest has engaged them in; and there, like the common Soldiers of an Army, shew their Courage and Warmth, as their Leaders direct, without ever examining, or so much as knowing the Cause they contend for. If a Man's Life shews, that he has no serious Regard to Religion; for what Reason should we think, that he beats his Head about the Opinions of his Church, and troubles himself to examine the grounds of this or that Doctrine? 'Tis enough for him to obey his Leaders, to have his Hand, and his Tongue ready for the support of the common Cause, and thereby approve himself to those, who can give him Credit, Preferment, or Protection in that Society. Thus Men become Professors of, and Combatants for those Opinions, they were never convinced of, nor Profelites to; no, nor ever had so much as floating in their Heads: And though one cannot say, there are fewer improbable Opinions in the World than there are; yet this is certain, there are fewer that actually assent to them than is imagined.

C H A P. XX.

Of the Division of the Sciences.

§. 1. **A**LL that can fall within the compass of humane Understanding, being either, *First*, The Nature of Things, as they are in themselves, their Relations, and their manner of Operation: Or, *Secondly*, that which Man himself ought to do, as a rational and voluntary Agent, for the Attainment of any Ends, especially Happiness: Or, *Thirdly*, The ways and means, whereby the Knowledge of both the one and the other of these, are attained and communicated; I think, *Science* may be divided properly into these *Three sorts*.

§. 2. *First*, The Knowledge of Things, as they are in their own proper Beings, their Constitutions, Properties, and Operations, whereby I mean not only Matter, and Body, but Spirits also, which have their proper Natures, Constitutions, and Operations as well as Bodies. This in a little more enlarged Sense of the Word, I call φυσική, or *natural Philosophy*. The end of this, is bare speculative Truth, and whatsoever can afford the Mind of Man any such, falls under this branch, whether it be God himself, Angels, Spirits, Bodies, or any other of their Affections, as Number, and Figure, &c.

§. 3. *Secondly*, πρακτική, The Skill of Right applying our own Powers and Actions, for the Attainment of Things good and useful. The most considerable under this Head, is *Ethicks*, which is the seeking out those Rules, and Measures of humane Actions, which lead to Happiness, and the Means to practise them. The end of this is not bare Speculation, and the Knowledge of Truth; but Right, and a Conduct suitable to it.

§. 4. *Thirdly*, The third Branch may be called μαθηματική, or *the Doctrine of Signs*, the most usual whereof being Words, it is aptly enough termed also λογική, *Logick*; the business whereof, is to consider the Nature of Signs, the Mind makes use of for the understanding of Things, or conveying its Knowledge to others. For since the Things, the Mind contemplates, are

none of them, besides it self, present to the Understanding; 'tis necessary that something else, as a Sign or Representation of the thing it considers, should be present to it: And these are *Ideas*. And because the *Ideas* of one Man's Mind cannot immediately be laid open to the view of another; nor be themselves laid up any where, but in the Memory, which is apt to let them go and lose them: Therefore to communicate our *Ideas* one to another, as well as record them for our own use, Signs of our *Ideas* are also necessary. Those which Men have found most convenient, and therefore generally make use of, are articulate Sounds. The Consideration then of *Ideas* and Words, as the great Instruments of Knowledge, make no despicable part of their Contemplation, who would take a view of humane Knowledge in the whole Extent of it. And, perhaps, if they were distinctly weighed, and duly considered, they would afford us another sort of Logick and Critick, than what we have been hitherto acquainted with.

§. 5. *This seems to me the first and most general, as well as natural division of the Objects of our Understanding.* For since a Man can employ his Thoughts about nothing, but either the Contemplation of Things themselves for the discovery of Truth; Or about the Things in his own Power, which are his own Actions, for the Attainment of his own Ends; Or the Signs the Mind makes use of, both in the one and the other, and the right ordering of them for its clearer Information. All which three, viz. Things as they are in themselves knowable; Actions as they depend on us, in order to Happiness; and the right use of Signs in order to Knowledge, being *toto caelo* different, they seemed to me to be the three great Provinces of the intellectual World, wholly separate and distinct one from another.

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4. *Moral Rules need a Proof, ergo not innate.*
5. *Instance in keeping Compacts.*
6. *Vertue generally approved, not because innate, but because profitable.*
7. *Men's Actions convince us, that the Rule of Vertue is not their internal Principle.*
8. *Conscience no proof of any innate Moral Rule.*
9. *Instances of Enormities practised without remorse.*
10. *Men have contrary practical Principles.*
- 11---13. *Whole Nations reject several Moral Rules.*
14. *Those who maintain innate practical Principles, tell us not what they are.*
- 15---19. *Lord Herbert's innate Principles examined.*
20. *Obj. Innate Principles may be corrupted, answered.*

CHAP. IV.

Other Considerations about innate Principles, both Speculative and Practical.

SECT.

1. *Principles not innate, unless their Ideas be innate.*
- 2,3. *Ideas, especially those belonging to Principles, not born with Children.*
- 4,5. *Identity an Idea not innate.*
6. *Whole and Part not innate Ideas.*
7. *Idea of Worship not innate.*
- 8---11. *Idea of GOD not innate.*
12. *Suitable to GOD's Goodness, that all Men should have an Idea of Him, therefore naturally imprinted by Him; answered.*
- 13---16. *Ideas of GOD various in different Men.*
17. *If the Idea of GOD be not innate, no other can be supposed innate.*
18. *Idea of Substance not innate.*
19. *No Propositions can be innate, since Ideas are innate.*
20. *Principles not innate, because of little use, or little certainty.*
21. *Difference of Men's Discoveries depends upon the different application of their Faculties.*
22. *Men must think and know for themselves.*
23. *Whence the Opinion of innate Principles.*
24. *Conclusion.*

B O O K II.

CHAP. I.

Of Ideas in general.

SECT.

1. *Idea is the Object of Thinking.*
2. *All Ideas come from Sensation or Reflexion.*
3. *The Objects of Sensation one Source of Ideas.*
4. *The Operations of our Minds about sensible Ideas, the other Source of them.*
5. *All our Ideas are of the one or the other of these.*
6. *Observable in Children.*
7. *Men are differently furnished with these, according to the different Objects they converse with.*
8. *Ideas of Reflexion had later, because they need Attention.*
9. *The Soul begins to have Ideas, when it begins to perceive.*
10. *The Soul thinks not always; for, First, it wants Proofs.*
11. *Secondly, It is not always conscious of it.*
12. *Thirdly, If a sleeping Man thinks without knowing it, the sleeping and waking Man are two persons.*
13. *Fourthly, Impossible to convince those that sleep without dreaming, that they think.*
14. *Fifthly, That Men dream without remembering it, in vain urged.*
15. *Sixthly, Upon their Hypothesis, the Thoughts of a sleeping Man ought to be most rational.*
16. *Seventhly, On this Hypothesis the Soul must have Ideas not derived from Sensation or Reflexion, of which there is no appearance.*
17. *Eighthly, If I think when I know it not, no body else can know it.*
18. *Ninthly, How knows any one that the Soul always thinks? For if it be not a self-evident Proposition, it needs proof.*
19. *Tenthly, That a Man should be busy in thinking, and yet not retain it the next moment, very improbable.*
- 20---24. *No Ideas but from Sensation or Reflexion, evident, if we observe Children.*
25. *In the reception of simple Ideas, the Understanding is most of all passive.*

CHAP. II.

Of simple Ideas.

SECT.

1. *Uncompounded Appearances.*
- 2, 3. *The Mind can neither make nor destroy them.*

CHAP. III.

Of Ideas of one Sense.

SECT.

1. *As Colours of Seeing, Sounds of Hearing.*
2. *Few simple Ideas have Names.*

CHAP. IV.

Of Solidity.

SECT.

1. *We receive this Idea from touch.*
2. *Solidity fills Space.*
3. *Distinct from Space.*
4. *From Hardness.*
5. *On Solidity depends Impulse, Resistance, and Protrusion.*
6. *What it is.*

CHAP. V.

Of simple Ideas by more than one Sense.

CHAP.

Contents.

CHAP. VI.

Of simple Ideas of Reflexion.

SECT.

1. *Are the Operations of the Mind about its other Ideas?*
2. *The Idea of Perception, and Idea of Willing, we have from Reflexion.*

2---4. *Perception is only when the Mind receives the Impression.*

5, 6. *Children, though they have Ideas, in the Womb, have none innate.*

7. *Which Ideas first is not evident.*

8---10. *Ideas of Sensation often changed by the Judgment.*

11---14. *Perception puts the difference between Animals and inferior Beings.*

15. *Perception the inlet of Knowledge.*

CHAP. VII.

Of Simple Ideas, both of Sensation and Reflexion.

SECT.

1---6. *Pleasure and Pain.*

7. *Existence and Unity.*

8. *Power.*

9. *Succession.*

10. *Simple Ideas the Materials of all our Knowledge.*

CHAP. X.

Of Retention.

SECT.

1. *Contemplation.*

2. *Memory.*

3. *Attention, Repetition, Pleasure, and Pain fix Ideas.*

4, 5. *Ideas fade in the Memory.*

6. *Constantly repeated Ideas can scarce be lost.*

7. *In remembering the Mind is often active.*

8. *Two defects in the Memory, Oblivion and Slowness.*

9. *Brutes have Memory.*

CHAP. VIII.

Other Considerations concerning simple Ideas.

SECT.

1---6. *Positive Ideas from privative Causes.*

7, 8. *Ideas in the Mind, Qualities in Bodies.*

9, 10. *Primary and Secondary Qualities.*

11, 12. *How primary Qualities produce their Ideas.*

13, 14. *How Secondary.*

15---23. *Ideas of primary Qualities are resemblances; of secondary, not.*

24, 25. *Reason of our mistake in this.*

26. *Secondary Qualities two-fold; First, Immediately perceivable; Secondly, Mediate perceivable.*

CHAP. XI.

Of Discerning, &c.

SECT.

1. *No Knowledge without it.*

2. *The difference of Wit and Judgment.*

4. *Clearness alone hinders Confusion.*

4. *Comparing.*

5. *Brutes compare, but imperfectly.*

6. *Compounding.*

7. *Brutes compound but little.*

8. *Naming.*

9. *Abstraction.*

10, 11. *Brutes abstract not.*

12, 13. *Idiots and mad Men.*

14. *Method.*

15. *These are the beginnings of humane Knowledge.*

16. *Appeal to Experience.*

17. *Dark room.*

CHAP. IX.

Of Perception.

SECT.

1. *It is the first simple Idea of Reflexion.*

2---4.

CHAP.

Contents.

CHAP. XII.

Of Complex Ideas.

SECT.

1. Made by the Mind out of simple ones.
2. Made voluntarily.
3. Are either Modes, Substances, or Relations.
4. Modes.
5. Simple and mixed Modes.
6. Substances Single or Collective.
7. Relation.
8. The abstrusest Ideas from the two Sources.

CHAP. XIII.

Of Space, and its simple Modes.

SECT.

1. Simple Modes.
2. Idea of Space.
3. Space and Extension.
4. Immenfity.
- 5, 6. Figure.
- 7--10. Place.
- 11--14. Extension and Body not the same.
- 15--17. Substance which we know not, no proof against Space without Body.
- 18, 19. Substance and Accidents of little use in Philosophy.
20. A Vacuum beyond the utmost bounds of Body.
21. The power of annihilation proves a Vacuum.
22. Motion proves a Vacuum.
23. The Ideas of Space and Body distinct.
- 24, 25. Extension being inseparable from Body, proves it not the same.
26. Ideas of Space and Solidity distinct.
27. Men differ little in clear simple Ideas.

CHAP. XIV.

Of Duration.

SECT.

1. Duration is fleeting Extension.
- 2--4. Its Idea from Reflexion on the train of our Ideas.

5. The Idea of Duration applicable to Things whilst we sleep.
- 6--8. The Idea of Succession not from Motion.
- 9--11. The train of Ideas has a certain degree of quickness.
12. This train the measure of other Successions.
- 13--15. The Mind cannot fix long on one invariable Idea.
16. Ideas, however made, include no sense of Motion.
17. Time is Duration set out by Measures.
18. A good measure of Time must divide its whole Duration into equal periods.
19. The Revolutions of the Sun and Moon the properest Measures of Time.
20. But not by their motion, but periodical appearances.
21. No two parts of Duration can be certainly known to be equal.
22. Time not the measure of Motion.
23. Minutes, Hours, and Years, not necessary measures of Duration.
24. The measure of Time two ways applied.
- 25--27. Our measure of Time applicable to Duration before Time.
- 28--31. Eternity.

CHAP. XV.

Of Duration and Expansion considered together

SECT.

1. Both capable of greater and less.
2. Expansion not bounded by Matter.
3. Nor Duration by Motion.
4. Why Men more easily admit infinite Duration, than infinite Expansion.
5. Time to Duration is as Place to Expansion.
6. Time and Place are taken for so much of either, as are set out by the Existence and Motion of Body.
7. Sometimes for so much of either, as we design by measures taken from the bulk or motion of Bodies.
8. They

Contents.

8. *They belong to all Beings.*
9. *All the parts of Extension are Extension; and all the parts of Duration, are Duration.*
10. *Their parts inseparable.*
11. *Duration is as a Line, Expansion as a Solid.*
12. *Duration has never two parts together, Expansion altogether.*

CHAP. XVI.

Of Number.

SECT.

1. *Number the simplest and most universal Idea.*
2. *Its Modes made by Addition.*
3. *Each Mode distinct.*
4. *Therefore Demonstrations in Numbers the most precise.*
- 5, 6. *Names necessary to Numbers.*
7. *Why Children number not earlier.*
8. *Number measures all Measurables.*

CHAP. XVII.

Of Infinity.

SECT.

1. *Infinity, in its original intention, attributed to Space, Duration, and Number.*
- 2, 3. *How we come by the Idea of Infinity.*
4. *Our Idea of Space boundless.*
5. *And so of Duration.*
6. *Why other Ideas are not capable of Infinity.*
7. *Difference between infinity of Space, and Space infinite.*
8. *We have no Idea of infinite Space.*
9. *Number affords us the clearest Idea of Infinity.*
- 10---11. *Our different conception of the Infinity of Number, Duration, and Expansion.*
12. *Infinite Divisibility,*
- 13, 14, 17, 18. } *No positive Idea of Infinite.*
- 15, 16, 19. *What is positive, what negative in our Idea of Infinite.*
20. *Some think they have a positive Idea of Eternity, and not Space.*
21. *Supposed positive Ideas of Infinity cause of Mistakes.*

22. *All these Ideas from Sensation and Reflexion.*

CHAP. XVIII.

Of other simple Modes.

SECT.

- 1, 2. *Modes of Motion.*
3. *Modes of Sounds.*
5. *Modes of Tastes.*
7. *Modes of Colours.*
8. *Why some Modes have, and others have not Names.*

CHAP. XIX.

Of the Modes of Thinking.

SECT.

- 1, 2. *Sensation, Remembrance, Contemplation, &c.*
3. *The various attention of the Mind in Thinking.*
4. *Hence probable that Thinking is the Action, not Essence of the Soul.*

CHAP. XX.

Of Modes of Pleasure and Pain.

SECT.

1. *Pleasure and Pain simple Ideas.*
2. *Good and Evil what.*
3. *Our Passions moved by Good and Evil.*
4. *Love.*
5. *Hatred.*
6. *Desire.*
7. *Joy.*
8. *Sorrow.*
9. *Hope.*
10. *Fear.*
11. *Despair.*
12. *Anger.*
13. *Envy.*
14. *What Passions all Men have.*
- 15, 16. *Pleasure and Pain what.*
17. *Shame.*
18. *These instances to shew how our Ideas of the Passions are got from Sensation and Reflexion.*

CHAP.

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CH P. XXI.

Of Power.

SECT.

1. *This Idea how got.*
2. *Power active and passive.*
3. *Power includes Relation.*
4. *The clearest Idea of active Power had from Spirit.*
5. *Will and Understanding, two Powers.*
6. *Faculties.*
7. *Whence the Ideas of Liberty and Necessity.*
- 8--12. *Liberty what.*
 9. *Supposes the Understanding and Will.*
 10. *Belongs not to Volition.*
 11. *Voluntary opposed to involuntary, not to Necessary.*
 13. *Necessity what.*
- 14--20. *Liberty belong not to the Will.*
 21. *But to the Agent or Man.*
- 22--24. *In respect of willing, a Man is not free.*
- 25--28. *The Will determined by something without it.*
 29. *The greater apparent Good determines the Will.*
- 30--32. *This is a Perfection of humane Nature.*
 33. *And takes not away Liberty.*
- 34, 35. *Why Men chuse differently.*
36. *Why they chuse amiss.*
38. *From the different appearance of Good.*
39. *And judging amiss on these Appearances.*
- 40--42. *First, in comparing present and future.*
43. *Secondly, In thinking wrong of the greatness or certainty of the Consequence of any Action.*
44. *Causes of wrong Judgment, Ignorance, Inadvertency, Sloth, Passion, Fashion, &c.*
45. *Preference of Vice to Vertue, a manifest wrong Judgment.*
47. *Recapitulation.*

CHAP. XXII.

Of Mixed Modes.

SECT.

1. *Mixed Modes what.*
2. *Made by the Mind.*
3. *Sometimes got by the Explication of their Names.*
4. *The Name ties the Parts of the mixed Modes into one Idea.*
5. *The Cause of making mixed Modes.*
6. *Why Words in one Language, have none answering in another.*
7. *And Languages change.*
8. *Mixed Modes, where they exist.*
9. *How we get the Ideas of mixed Modes.*
10. *Motion, Thinking and Power, have been most modified.*
11. *Several Words seeming to signifie Action, signifie but the Effect.*
12. *Mixed Modes, made also of other Ideas.*

CHAP. XXIII.

Of the Complex Ideas of Substances.

SECT.

1. *Ideas of Substances how made.*
2. *Our Idea of Substance in general.*
- 3--6. *Of the sorts of Substances.*
 4. *No clear Idea of Substance in general.*
 5. *As clear an Idea of Spirit, as Body.*
 7. *Powers a great part of our complex Ideas of Substances.*
 8. *And why.*
 9. *Three sorts of Ideas make our complex ones of Substances.*
- 10, 11. *The now secondary Qualities of Bodies would disappear, if we could discover the primary ones of their minute Parts.*
12. *Our Faculties of Discovery suited to our State.*
13. *Conjecture about Spirits.*
14. *Complex Ideas of Substances.*
15. *Idea of spiritual Substances, as clear as of bodily Substances.*
16. *No Idea of abstract Substance.*

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- 17. *The Cohesion of solid Parts, and impulse the primary Ideas of Body.*
- 18. *Thinking and Motivity, the primary Ideas of Spirit.*
- 19--21. *Spirits capable of Motion.*
- 22. *Idea of Soul and Body compared.*
- 23--27. *Cohesion of solid Parts in Body, as hard to be conceived, as Thinking in a Soul.*
- 28, 29. *Communication of Motion by Impulse, or by Thought, equally intelligible.*
- 30. *Ideas of Body and Spirit compared.*
- 31. *The Notion of Spirit involves no more difficulty in it, than that of Body.*
- 32. *We know nothing beyond our simple Ideas.*
- 33--35. *Idea of God.*
- 36. *No Ideas in our Complex one of Spirits, but those got from Sensation or Reflexion.*
- 37. *Recapitulation.*

CHAP. XXIV.

Of Collective Ideas of Substances.

SECT.

- 1. *One Idea.*
- 2. *Made by the Power of composing in the Mind.*
- 3. *All artificial Things are collective Ideas.*

CHAP. XXV:

Of Relation.

SECT.

- 1. *Relation what.*
- 2. *Relations without correlative Terms, not easily perceived.*
- 3. *Some seemingly absolute Terms contain Relations.*
- 4. *Relation different from the Things related.*
- 5. *Change of Relation may be without any Change in the Subject.*
- 6. *Relation only betwixt two Things.*
- 7. *All Things capable of Relation.*

- 8. *The Ideas of Relations clearer often, than of the Subjects related.*
- 9. *Relations all terminate in simple Ideas.*
- 10. *Terms leading the Mind beyond the Subject denominated, are Relative.*
- 11. *Conclusion.*

CHAP. XXVI.

Of Cause of Effect, and other Relations:

SECT.

- 1. *Whence their Ideas got.*
- 2. *Creation, Generation, making Alteration.*
- 3, 4. *Relations of Time.*
- 5. *Relations of Place and Extension.*
- 6. *Absolute Terms often stand for Relations.*

CHAP. XXVII.

Of other Relations.

SECT.

- 1. *Proportional.*
- 2. *Natural.*
- 3. *Instituted.*
- 4. *Moral.*
- 5. *Moral Good and Evil.*
- 6. *Moral Rules.*
- 7. *Laws.*
- 8. *Divine Law the measure of Sin and Duty.*
- 9. *Civil Law, the measure of Crimes and Innocence.*
- 10, 11. *Philosophical Law, the measure of Vertue and Vice.*
- 12. *Its Inforcements, Commendation, and Discredit.*
- 13. *These three Laws the Rules of moral Good and Evil.*
- 14, 15. *Morality is the Relation of Actions to these Rules.*
- 16. *The denominations of Actions often mislead us.*
- 17. *Relations innumerable.*
- 18. *All Relations terminate in simple Ideas.*
- 19. *We have ordinary as clear (or clearer) Notion of the Relation, as of its Foundation.*
- 20. *The Notion of the Relation is the same,*

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*same, whether the Rule any Action
is compared to, be true or false.*

CHAP. XXVIII.

Of Clear and Distinct, Obscure and Confused Ideas.

SECT.

1. Ideas some clear and distinct, others obscure and confused.
2. Clear and Obscure, explained by Sight.
3. Causes of Obscurity.
4. Distinct and confused, what.
5. Objection.
6. Confusion of Ideas, is in reference to their Names.
7. Defaults which make Confusion.
First, complex Ideas made up of too few simple ones.
8. Secondly, Or its simple ones jumbled disorderly together.
9. Thirdly, Or are mutable and undetermined.
10. Confusion without reference to Names, hardly conceivable.
11. Confusion concerns always two Ideas.
12. Causes of Confusion.
13. Complex Ideas may be distinct in one part, and confused in another.
14. This if not heeded, causes Confusion in our Arguings.
15. Instance in Eternity.
- 16, 17. ——— Divisibility of Matter.

CHAP. XXIX.

Of Real and Fantastical Ideas.

SECT.

1. Real Ideas are conformable to their Archetypes.
2. Simple Ideas all real.
3. Complex Ideas are voluntary Combinations.
4. Mixed Modes made of consistent Ideas are real.
5. Ideas of Substances are real, when they agree with the Existence of Things.

CHAP. XXX.

Of Adequate and Inadequate Ideas.

SECT.

1. Adequate Ideas, are such as perfectly represent their Archetypes.
2. Simple Ideas all adequate.
3. Modes are all adequate.
- 4, 5. Modes in reference to settled Names, may be inadequate.
- 6, 7. Ideas of Substances, as referr'd to real Essences not adequate.
- 8---11. Ideas of Substances, as Collections of their Qualities, are all inadequate.
12. Simple Ideas *ἐν τῷ ὅλῳ*, and adequate.
13. Ideas of Substances are *ἐν τῷ ὅλῳ*, inadequate.
14. Ideas of Modes and Relations are Archetypes, and cannot but be adequate.

CHAP. XXI.

Of true and false Ideas.

SECT.

1. Truth and Falshood properly belongs to Propositions.
2. Metaphysical Truth contains a tacit Proposition.
3. No Idea as an appearance in the Mind true or false.
4. Ideas referred to any thing may be true or false.
5. Other Men's Ideas, real Existence, and supposed real Essences, are what Men usually refer their Ideas to.
- 6---8. The cause of such references.
9. Simple Ideas may be false in reference to others of the same name, but are least liable to be so.
10. Ideas of mixed Modes most liable to be false in this sense.
11. Or at least to be thought false.
12. And why.
13. As referred to real Existences, none of our Ideas can be false, but those of Substances.
- 14---16. First, Simple Ideas in this sense not false, and why.
15. Though one Man's Idea of Blue, should be different from another's.

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17. Secondly, Modes not false.
18. Thirdly, Ideas of Substances are false, when the Combination is made of simple Ideas that do never co-exist; or has in it the negation of anyone that does constantly coexist.
19. Truth or Falshood always supposes affirmation or negation.
20. Ideas in themselves neither true nor false.
21. But are false, First, when judged

- agreeable to another Man's Idea without being so.
22. Secondly, When judged to agree to real Existence, when they do not.
23. Thirdly, When judged adequate without being so.
24. Fourthly, When judged to represent the real Essence.
25. Ideas when false.
26. More properly to be called Right or Wrong.
27. Conclusion.

B O O K III.

CHAP. I.

Of Words or Language in general.

SECT.

1. Man fitted to form articulate Sounds.
2. To make them signs of Ideas.
- 3, 4. To make general Signs.
5. Words ultimately derived from such as signify sensible Ideas.
6. Distribution.

CHAP. II.

Of the Signification of Words.

LECT.

1. Words are sensible Signs necessary for Communication.
- 2, 3. Words are the sensible Signs of his Ideas who uses them.
4. Words often secretly referred, First, to the Ideas in other Men's Minds.
5. Secondly, To the reality of Things.
6. Words by use readily excite Ideas.
7. Words often used without signification.
8. Their Signification perfectly arbitrary.

CHAP. III.

Of general Terms.

SECT.

1. The greatest part of Words general.
2. For every particular thing to have a name is impossible.
- 3, 4. And useless.
5. What things have proper names.
- 6---8. How general Words are made.
9. General Natures are nothing but abstract Ideas.
10. Why the Genus is ordinarily made use of in Definitions.
11. General and universal are Creatures of the Understanding.
12. Abstract Ideas are the Essences of the Genera and Species.
13. They are the Workmanship of the Understanding, but have their foundation in the similitude of things.
14. Each distinct abstract Idea is a distinct Essence.
15. Real and nominal Essence.
16. Constant connexion between the Name and nominal Essence.
17. Supposition that Species are distinguished by their real Essences useless.
18. Real and nominal Essence the same in simple Ideas and Modes, different in Substances.
19. Essences ingenerable and incorruptible.
20. Recapitulation.

CHAP.

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CHAP. IV.

Of the Names of simple Ideas.

SECT.

1. Names of simple Ideas, Modes, and Substances, have each something peculiar.
2. First, Names of simple Ideas and Substances, intimate real Existence.
3. Secondly, Names of simple Ideas and Modes signify always both real and nominal Essence.
4. Thirdly, Names of simple Ideas undefinable.
5. If all were definable, 'twould be a process in infinitum.
6. What a Definition is.
7. Simple Ideas why undefinable.
- 8, 9. Instances Motion.
10. Light.
11. Simple Ideas why undefinable, farther explained.
- 12, 13. The contrary shewed in complex Ideas by instances of a Statue and Rainbow.
14. The Names of complex Ideas when to be made intelligible by Words.
15. Fourthly, Names of simple Ideas least doubtful.
16. Fifthly, Simple Ideas have few Ascents in linea prædicamentali.
17. Sixthly, Names of simple Ideas stand for Ideas not at all arbitrary.

CHAP. V.

Of the Names of mixed Modes and Relations.

SECT.

1. They stand for abstract Ideas, as other general Names.
2. First, The Ideas they stand for, are made by the Understanding.
3. Secondly, Made arbitrarily, and without Patterns.
4. How this is done.
5. Evidently arbitrary, in that the

Idea is often before the Existence.

6. Instances Murder, Incest, Stabbing.
7. But still subservient to the end of Language.
8. Whereof the intranslatable Words of divers Languages are a proof.
9. This shews Species to be made for Communication.
- 10, 11. In mixed Modes 'tis the Name that ties the Combination together, and make it a Species.
12. For the Originals of mixed Modes, we look no farther than the Mind, which also shews them to be the Workmanship of the Understanding.
13. Their being made by the Understanding without Patterns, shews the reason why they are so compounded.
14. Names of mixed Modes stand always for their real Essences.
15. Why their Names are usually got before their Ideas.
16. Reason of my being so large on this Subject.

CHAP. VI.

Of the Names of Substances.

SECT.

1. The common Names of Substances stand for sorts.
2. The Essence of each sort is the abstract Idea.
3. The nominal and real Essence different.
- 4-- 6. Nothing essential to Individuals.
- 7, 8. The nominal Essence bounds the Species.
9. Not the real Essence which we know not.
10. Not substantial forms which we know less.
11. That the nominal Essence is that whereby we distinguish Species, farther evident from Spirits.
12. Whereof there are probably numberless Species.

13. The

Contents.

13. *The nominal Essence that of the Species, proved from Water and Ice.*
- 14--18. *Difficulties against a certain number of real Essences.*
19. *Our nominal Essences of Substances, not perfect Collections of Properties.*
21. *But such a Collection as our Name stands for.*
22. *Our abstract Ideas are to us the measures of Species, instance in that of Man.*
23. *Species not distinguished by Generation.*
24. *Distinguishing them by substantial Forms, not pretended to but in this part of the World. Substances distinguished into Species, by their obvious appearances before substantial Forms were thought of.*
25. *The specifick Essences are made by the Mind.*
26. *Therefore very various and uncertain.*
27. *But not so arbitrarily as mixed Modes.*
28. *Though very imperfect.*
29. *Which yet serves for common Converse.*
30. *But makes several Essences signified by the same Name.*
31. *The more general our Ideas are, the more inimpleat and partial they are.*
32. *This all accommodated to the end of Speech.*
33. *Instance in Cassnaries.*
34. *Men make the Species instance Gold.*
35. *Though Nature make the Similitude.*
36. *And continues it in the races of Things.*
37. *Each abstract Idea is an Essence.*
38. *Genera and Species, in order to naming, instance watch.*
39. *Species of artificial Things less confused than natural.*
40. *Artificial Things of distinct Species.*
41. *Substances alone have proper Names.*

42. *Difficulty to treat of Words with Words.*
- 43, 44. *Instance of mixed Modes in Kineah and Niouph..*
- 45, 46. *Instance of Substances in Zahab.*
47. *Their Ideas imperfect, and therefore various.*
48. *Therefore to fix their Species, a real Essence is supposed.*
49. *Which Supposition is of no use.*
50. *Conclusion.*

CHAP. VII.

Of Particles:

SECT.

1. *Particles connect Parts, or whole Sentences together.*
2. *In them consists the art of well speaking.*
- 3, 4. *They shew what Relation the Mind gives to its own Thoughts.*
5. *Instance in But.*
6. *This Matter but lightly touched here.*

CHAP. VIII.

Of Abstract and Concrete Terms:

SECT.

1. *Abstract Terms not predicable one of another, and why.*
2. *They shew the difference of our Ideas.*

CHAP. IX.

Of the Imperfection of Words.

SECT.

1. *Words are used for recording and communicating our Thoughts.*
2. *Any Words will serve for recording.*
3. *Communication by Words, Civil or Philosophical.*
4. *The Imperfection of Words is the Doubtfulness of their Signification.*
5. *Causes of their Imperfection.*
6. *The Names of mixed Modes doubtful.*

First,

The Contents.

- First, because the Ideas they stand for, are so complex.*
7. *Secondly, Because they have no Standards.*
 8. *Propriety not a sufficient Remedy.*
 9. *The way of Learning these Names contributes also to their Doubtfulness.*
 10. *Hence unavoidable Obscurity in ancient Authors.*
 12. *First, To real Essences that cannot be known.*
 - 13, 14. *Secondly, To co-existing Qualities, which are known but imperfectly.*
 15. *With this Imperfection, they may serve for Civil, but not well for Philosophical use.*
 16. *Instance Liquor of Nerves.*
 17. *Instance Gold.*
 18. *The Names of simple Ideas the least doubtful.*
 19. *And next to them simple Modes.*
 20. *The most doubtful are the Names of very compounded mixed Modes and Substances.*
 21. *Why this Imperfection charged upon Words.*
 - 22, 23. *This should teach us Moderation, in imposing our own Sense of old Authors.*
 12. *This Art has perplexed Religion and Justice.*
 13. *And ought not to pass for Learning.*
 14. *Fourthly, Abuse, taking them for Things.*
 15. *Instance in Matter.*
 16. *This makes Errors lasting.*
 17. *Fifthly, Abuse setting them for what they cannot signifie.*
 18. *V.g. putting them for the real Essences of Substances.*
 19. *Hence we think every change of our Idea in Substances, not to change the Specie.*
 20. *The Cause of this Abuse, a Supposition of Nature's working always regularly.*
 21. *This Abuse contains two false Suppositions.*
 22. *Sixthly, Abuse, a Supposition that Words have a certain and evident signification.*
 23. *The Ends of Language, First, To convey our Ideas.*
 24. *Secondly, to doe it with quickness.*
 25. *Thirdly, Therewith to convey the Knowledge of Things.*
 - 26--31. *How Men's Words fail in all these,*
 32. *How in Substances.*
 33. *How in Modes and Relations.*
 34. *Seventhly, Figurative Speech also an Abuse of Language.*

CHAP. X.

Of the Abuse of Words.

SECT.

1. *Abuse of Words.*
- 2, 3. *First, Words without any, or without Ideas.*
4. *Occasioned by learning Names before the Ideas they belong to.*
5. *Secondly, Unsteady Application of them.*
6. *Thirdly, Affected Obscurity by wrong Application.*
7. *Logick and Dispute has much contributed to this.*
8. *Calling it Subtily.*
9. *This Learning very little benefited Society.*
10. *But destroy'd the Instruments of Knowledge and Communication.*
11. *As useful as to confound the sound of the Letters.*

CHAP. XI.

Of the Remedies of the fore-going Imperfection and Abuses.

SECT.

1. *They are worth seeking.*
2. *Are not easie.*
3. *But yet necessary to Philosophy.*
4. *Misuse of Words the cause of great Errors.*
5. *Obstinacy.*
6. *And Wrangling.*
7. *Instance Bat and Bird.*
8. *First, Remedy to use no Word without an Idea.*
9. *Secondly, Have distinct Ideas annexed to them in Modes.*
10. *And distinct and conformable in Substances.*

Ccc

11. *Thirdly,*

Contents.

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| <p>11. <i>Thirdly, Propriety.</i>
 12. <i>Fourthly, To make known their meaning.</i>
 13. <i>And that three ways.</i>
 14. <i>First, In simple Ideas by synonymous terms or shewing.</i>
 15. <i>Secondly, in mixed Modes by definition.</i>
 16. <i>Morality capable of Demonstration.</i>
 17. <i>Definitions can make moral Discourses clear.</i>
 18. <i>And is the only way.</i>
 19. <i>Thirdly, In Substances, by shewing</i></p> | <p><i>and defining.</i>
 20, 21. <i>Ideas of the leading Qualities of Substances, are best got by shewing.</i>
 22. <i>The Ideas of their Powers best by Definition.</i>
 23. <i>A Reflexion on the Knowledge of Spirits.</i>
 24. <i>Ideas also of Substances must be conformable to Things.</i>
 25. <i>Not easie to be made so.</i>
 26. <i>Fifthly, Remedy, Constancy in their signification.</i>
 27. <i>Where it ought to be explained, when varied.</i></p> |
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B O O K IV.

CHAP. I.

Of Knowledge in general.

SECT.

1. *Our Knowledge conversant about our Ideas.*
2. *Knowledge is the Perception of the Agreement or Disagreement of two Ideas.*
3. *This Agreement four-fold.*
4. *First, of Identity or Diversity.*
5. *Secondly, Relative.*
6. *Thirdly, of Co-existence.*
7. *Fourthly, of real Existence.*
8. *Knowledge actual or habitual.*
9. *Habitual Knowledge two-fold.*

CHAP. II.

Of the Degrees of our Knowledge.

SECT.

1. *Intuitive.*
2. *Demonstrative.*
3. *Depends on Proofs.*
4. *But not so easie.*
5. *Not without precedent doubt.*
6. *Not so clear.*
7. *Each step must have intuitive Evidence.*

8. *Hence the mistake, ex præcognitis, & præconcessis.*

9. *Demonstration not limited to quantity.*

10---13. *Why it has been so thought.*

14. *Sensitive Knowledge of particular Existence.*

15. *Knowledge not always clear, where the Ideas are so.*

CHAP. III.

Of the Extent of Humane Knowledge.

SECT.

1. *First, No farther than we have Ideas.*
2. *Secondly, No farther than we can perceive their Agreement or Disagreement.*
3. *Thirdly, Intuitive Knowledge extends it self not to all the Relations of all our Ideas.*
4. *Fourthly, Nor demonstrative Knowledge.*
5. *Fifthly, Sensitive Knowledge narrower than either.*
6. *Sixthly, Our Knowledge therefore narrower than our Ideas.*
7. *How far our Knowledge reaches.*
8. *First, Our Knowledge of Identity*

Contents.

- ty and Diversity, as far as our Ideas.
9. Secondly, Of Co-existence a very little way.
 10. Because the connexion between most simple Ideas is unknown.
 11. Especially of Secondary Qualities.
 - 12---14. And farther, because all connexion between any secondary and primary Qualities is undiscoverable.
 15. Of Repugnancy to co-exist larger.
 16. Of the Co-existence of Powers a very little way.
 17. Of the Spirits yet narrower.
 18. Thirdly, Of other Relations it is not easie to say how far. Morality capable of Demonstration.
 19. Two Things have made moral Ideas thought incapable of Demonstration. Their Complexedness, and want of sensible Representations.
 20. Remedies of those Difficulties.
 21. Fourthly, of real Existence we have an intuitive Knowledge of our own, demonstrative of God's, sensible of some few other Things.
 22. Our Ignorance great.
 23. First, One Cause of it want of Ideas, either such as we have no Conception of, or such as particularly we have not.
 24. Because of their Remoteness, or,
 25. Because of their Minuteness.
 26. Hence no Science of Bodies.
 27. Much less of Spirits.
 28. Secondly, Want of a discoverable connexion between Ideas we have.
 29. Instances.
 30. Thirdly, Want of tracing our Ideas.
 31. Extent in respect of Universality.

CHAP. IV.

Of the Reality of our Knowledge.

SECT.

1. Objection; Knowledge placed in Ideas may be all bare Vision.
- 2, 3. Answer, Not so, where Ideas agree with Things.
4. As, First, All simple Ideas do.
5. Secondly, All complex Ideas, except of Substances.

6. Hence the Reality of mathematical Knowledge.
7. And of moral.
8. Existence not required to make it real.
9. Nor will it be less true or certain, because moral Ideas are of our own making and naming.
10. Mis-naming disturbs not the Certainty of the Knowledge.
11. Ideas of Substances have their Archetypes without us.
12. So far as they agree with those, so far our Knowledge concerning them is real.
13. In our Enquiries about Substances, we must consider Ideas, and not confine our Thoughts to Names or Species supposed set out by Names.
- 14---17. Objection against a Changeling, being something between Man and Beast answered.
18. Recapitulation.

CHAP. V.

Of Truth in General

SECT.

1. What Truth is.
2. A right joining, or separating of Signs; i. e. Ideas or Words.
3. Which make mental or verbal Propositions.
4. Mental Propositions are very hard to be treated of.
5. Being nothing but the joining, or separating Ideas without Words.
6. When mental Propositions contain real Truth, and when verbal.
7. Objection against verbal Truth, that it may be thus alchimerical.
8. Answered real Truth is about Ideas agreeing to Things.
9. Falshood is the joining of Names otherwise than their Ideas agree.
10. General Propositions to be treated of more at large.
11. Moral and metaphysical Truth.

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CHAP. VI.

Of Universal Propositions, their Truth and Certainty.

SECT.

1. Treating of Words necessary to Knowledge.
2. General Truths hardly to be understood, but in verbal Propositions.
3. Certainty two-fold, of Truth and of Knowledge.
4. No Proposition can be known to be true, where the Essence of each Species mentioned is not known.
5. This more particularly concerns Substances.
6. The Truth of few universal Propositions concerning Substances, is to be known.
7. Because Co-existence of Ideas in few Cases to be known.
- 8, 9. Instance in Gold.
10. As far as any such Co-existence can be known, so far universal Propositions may be certain. But this will go but a little way, because,
- 11, 12. The Qualities, which make our complex Ideas of Substances, depend mostly on external, remote, and unperceived Causes.
13. Judgment may reach farther, but that is not Knowledge.
14. What is requisite for our Knowledge of Substances.
15. Whilst our Ideas of Substances contain not their real Constitutions, we can make but few general certain Propositions concerning them.
16. Wherein lies the general Certainty of Propositions.
3. Self-evidence not peculiar to received Axioms.
4. First, As to Identity and Diversity, all Propositions are equally self-evident.
5. Secondly, In Co-existence we have few self-evident Propositions.
6. Thirdly, In other Relations we may have.
7. Fourthly, Concerning real Existence we have none.
8. These Axioms do not much influence our other Knowledge.
- 9, 10. Because they are not the Truths the first known.
11. What use these general Maxims have.
12. Maxims, if care be not taken in the use of Words, may prove contradictions.
13. Instance in Vacuum.
14. They prove not the Existence of Things without us.
15. Their Application dangerous about complex Ideas.
- 16---18. Instance in Man.
19. Little use of these Maxims in Proofs where we have clear and distinct Ideas.
20. Their use dangerous where our Ideas are confused.

CHAP. VII.

Of Maxims.

SECT.

1. They are self-evident.
2. Wherein that Self-evidence consists.

CHAP. VIII.

Of Trifling Propositions.

SECT.

1. Some Propositions bring no increase to our Knowledge.
- 2, 3. As First, Identical Propositions.
4. Secondly, When a part of any complex Idea is predicated of the whole.
5. As part of the definition of the defined.
6. Instance Man and Palfry.
7. For this teaches but the signification of Words.
8. But no real Knowledge.
9. General Propositions concerning Substances are often trifling.
10. And why.
11. Thirdly, Using Words variously, is trifling with them.
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12. *Marks of verbal Propositions, First, Predication in abstract.*
13. *Secondly, A part of the Definition predicated of any term.*

CHAP. IX.

Of our Knowledge of Existence.

SECT.

1. *General certain Propositions concern not Existence.*
2. *A threefold Knowledge of Existence.*
3. *Our Knowledge of our own Existence is intuitive.*

CHAP. X.

Of the Existence of a GOD.

SECT.

1. *We are capable of knowing certainly that there is a GOD.*
2. *Man knows that he himself is.*
3. *He knows also, that Nothing cannot produce a Being, therefore something eternal.*
4. *That eternal Being must be most powerful.*
5. *And most knowing.*
6. *And therefore GOD.*
7. *Our Idea of a most perfect Being not the sole proof of a GOD.*
8. *Something from Eternity.*
9. *Two sorts of Beings, Cogitative and Incogitative.*
10. *Incogitative Being cannot produce a Cogitative.*
- 11, 12. *Therefore there has been an eternal Wisdom.*
13. *Whether material or no.*
14. *Not material, First, Because every particle of Matter is not cogitative.*
15. *Secondly, One particle alone of Matter, cannot be cogitative.*
16. *Thirdly, A System of incogitative Matter, cannot be cogitative.*
17. *Whether in motion, or at rest.*
- 18, 19. *Matter not co-eternal with an eternal Mind.*

CHAP. XI.

Of the Knowledge of the Existence of other Things.

SECT.

1. *Is to be had only by Sensation.*
2. *Instance whiteness of this Paper.*
3. *This though not so certain as demonstration, yet may be called Knowledge, and proves the existence of things without us.*
4. *First, Because we cannot have them but by the inlet of the Senses.*
5. *Because an Idea from actual Sensation, and another from Memory, are very distinct Perceptions.*
6. *Thirdly, Pleasure or Pain, which accompanies actual Sensation, accompanies not the returning of those Ideas without the external Objects.*
7. *Fourthly, Our Senses assist one another's Testimony of the Existence of outward Things.*
8. *This Certainty is as great as our Condition needs.*
9. *But reaches no farther than actual Sensation.*
10. *Folly to expect demonstration in every thing.*
11. *Past Existence is known by Memory.*
12. *The Existence of Spirits not knowable.*
13. *Particular Propositions concerning Existence are knowable.*
14. *And general Propositions concerning abstract Ideas.*

CHAP. XII.

Of the improvement of our Knowledge.

SECT.

1. *Knowledge is not from Maxims.*
2. *(The occasion of that Opinion.)*
3. *But from the comparing clear and distinct Ideas.*
4. *Dangerous to build upon precarious Principles.*
5. *This no certain way to Truth.*
6. *But*

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6. *But to compare clear compleat Ideas under steddly Names.*
7. *The true method of advancing Knowledge, is by considering our abstract Ideas.*
8. *By which, Morality also may be made clearer.*
9. *But Knowledge of Bodies is to be improved only by Experience.*
10. *This may procure us convenience, not Science.*
11. *We are fitted for moral Knowledge, and natural Improvements.*
12. *But must beware of Hypotheses and wrong Principles.*
13. *The true use of Hypotheses.*
14. *Clear and distinct Ideas with settled Names, and the finding of those which shew their agreement, or disagreement, are the ways to enlarge our Knowledge.*
15. *Mathematicks an instance of it.*

CHAP. XIII.

Some other Considerations concerning our Knowledge.

SECT.

1. *Our Knowledge partly necessary, partly voluntary.*
2. *The application voluntary; but we know as things are, not as we please.*
3. *Instances in Numbers.*

CHAP. XIV.

Of Judgment.

SECT.

1. *Our Knowledge being short, we want something else.*
2. *What use to be made of this twilight Estate.*
3. *Judgment supplies the want of Knowledge.*
4. *Judgment is the presuming things to be so, without perceiving it.*

CHAP. XV.

Of Probability.

SECT.

1. *Probability is the appearance of agreement upon fallible proofs.*
2. *It is to supply the want of Knowledge.*
3. *Being that which makes us presume things to be true, before we know them to be so.*
4. *The grounds of Probability are two; conformity with our own Experience, or the Testimony of others Experience.*
5. *In this all the agreements pro and con ought to be examined, before we come to a Judgment.*
6. *They being capable of great variety*

CHAP. XVI.

Of the Degrees of Assent.

SECT.

1. *Our Assent ought to be regulated by the grounds of Probability.*
2. *These cannot always be all actually in view, and then we must content our selves with the remembrance that we once saw ground for such a degree of Assent.*
3. *The ill consequence of this, if our former Judgment were not rightly made.*
4. *The right use of it is mutual Charity and forbearance.*
5. *Probability is either of matter of fact or speculation.*
6. *The concurrent experience of all other Men with ours, produces assurance approaching to Knowledge.*
7. *Unquestionable Testimony and Experience for the most part produce Confidence.*
8. *Fair Testimony, and the nature of the Thing indifferent, produces also confident belief.*
9. *Experiences and Testimonies clashing, infinitely vary the degrees of Probability.*
10. *Traditional Testimonies, the more their*

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more their removed, the less their Proof.

11. *Tet History is of great use.*
12. *In things which Sense cannot discover, Analogy is the great Rule of Probability.*
13. *One case where contrary Experience lessens not the Testimony.*
14. *The bare Testimony of Revelation is the highest certainty.*

CHAP. XVII.

Of Reason.

SECT.

1. *Various significations of the word Reason.*
2. *Wherein Reasoning consists.*
3. *Its four parts.*
4. *Syllogism not the great Instrument of Reason.*
5. *Helps little in Demonstration, less in Probability.*
6. *Serves not to increase our Knowledge, but fence with it.*
7. *Other helps should be sought.*
8. *We Reason about Particulars.*
9. *First, Reason fails us for want of Ideas.*
10. *Secondly, Because of obscure and imperfect Ideas.*
11. *Thirdly, For want of intermediate Ideas.*
12. *Fourthly, Because of wrong Principles.*
13. *Fifthly, Because of doubtful terms.*
14. *Our highest degree of Knowledge is intuitive, without reasoning.*
15. *The next is Demonstration by reasoning.*
16. *To supply the narrowness of this, we have nothing but Judgment upon probable reasoning.*
17. *Intuition, Demonstration, Judgment.*
18. *Consequences of Words, and Consequences of Ideas.*
19. *Four sorts of Arguments: First, Ad Verecundiam.*
20. *Secondly, Ad Ignorantiam.*
21. *Thirdly, Ad Hominem.*

22. *Fourthly, Ad Judicium.*

23. *Above, contrary, and according to Reason.*

24. *Reason and Faith not opposite.*

CHAP. XVIII.

Of Faith and Reason, and their distinct Provinces.

SECT.

1. *Necessary to know their Boundaries.*
2. *Faith and Reason what, as contradistinguished.*
3. *No new simple Idea can be conveyed by traditional Revelation.*
4. *Traditional Revelation may make us know Propositions knowable also by Reason, but not with the same certainty that Reason doth.*
5. *Revelation cannot be admitted against the clear evidence of Reason.*
6. *Traditional Revelation much less.*
7. *Things above Reason.*
8. *Or not contrary to Reason, if revealed, are matter of Faith.*
9. *Revelation, in matters where Reason cannot judge, or but probably, ought to be hearkened to.*
10. *In matters where Reason can afford certain knowledge that is to be hearkened to.*
11. *If the boundaries be not set between Faith and Reason, no Enthusiasm, or extravagancy in Religion can be contradicted.*

CHAP. XIX.

Of Wrong Assent, or Error.

SECT.

1. *Causes of Error.*
2. *First, Want of Proofs.*
3. *Obj. What shall become of those who want them, answered.*
4. *People hindered from Enquiry.*
5. *Secondly, Want of skill to use them.*

6. *Third.*

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|---|---|
| 6. <i>Thirdly, Want of Will to use them.</i> | 17. <i>Fourthly, Authority.</i> |
| 7. <i>Fourthly, Wrong measures of Probability, whereof.</i> | 18. <i>Men not in so many Errours as is imagined.</i> |
| <hr/> | |
| 8--10. <i>First, Doubtful Propositions taken for Principles.</i> | |
| 11. <i>Secondly, Received Hypothesis.</i> | |
| 12. <i>Thirdly, predominant Passions.</i> | |
| 13. <i>The means of evading Probabilities, 1st. Supposed fallacy.</i> | |
| 14. <i>2dly. Supposed Arguments for the contrary.</i> | |
| 15. <i>What Probabilities determine the Assent.</i> | |
| 16. <i>Where it is in our power to suspend it.</i> | |

CHAP. XX.

Division of the Sciences.

SECT.

1. *Three sorts.*
2. *First, Physica.*
3. *Secondly, Practica.*
4. *Thirdly, Σημαντικη.*
5. *This is the first Division of the Objects of Knowledge.*

FINIS.
